



**Harvard
Medical
Alumni
Bulletin**

Nov./Dec. 1974

Is there a doctor in the house?



Why add Librium® (chlordiazepoxide HCl) to your cardiovascular regimen?

Excessive anxiety in susceptible patients can set in motion a chain of responses which add to the heart's work and thereby increase the possibility of cardiovascular complications. Furthermore, intense anxiety may interfere with effective medical management since some patients, in an attempt to deny their illness, may resist acceptance of necessary medication, dietary restrictions and other therapeutic directives. When counseling and reassurance alone are inadequate to

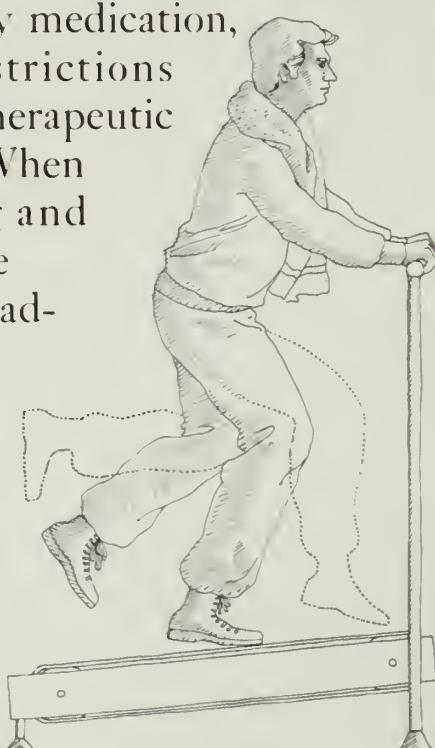


relieve undue anxiety, adjunctive Librium (chlordiazepoxide HCl) may be beneficial.

"Specific" for anxiety reduction... wide margin of safety

Librium is used as an adjunct to primary cardiovascular medications, since it acts directly on the central nervous system, reducing excessive anxiety and emotional tension. In so doing, Librium indirectly affects cardiovascular function.

Librium has a high degree of antianxiety effectiveness with wide margin of safety. In proper dosage, Librium usually helps calm the overanxious patient without unduly interfering with mental acuity or general performance. In the elderly and debilitated, the initial dosage is 5 mg *b.i.d.* or less to preclude ataxia or oversedation, in-





creasing gradually as needed and tolerated.

Librium is used concomitantly with certain specific medications of other classes of drugs, such as cardiac glycosides, diuretics, antihypertensive agents, vasodilators and anticoagulants. Although clinical studies have not established a cause and effect relationship, physicians should be aware that variable effects on blood coagulation have been reported very rarely in patients receiving oral anticoagulants and Librium. After anxiety has been reduced to tolerable levels, Librium therapy should be discontinued.

5 mg
For geriatric patients and, in general, for milder degrees of clinically significant anxiety

10 mg
For relief of mild to moderate anxiety

25 mg
Specifically for use in severe anxiety

For relief of excessive anxiety adjunctive

Librium® 10 mg
(chlordiazepoxide HCl)
1 or 2 capsules t.i.d./q.i.d.

Before prescribing, please consult complete product information, a summary of which follows:

Indications: Relief of anxiety and tension occurring alone or accompanying various disease states.

Contraindications: Patients with known hypersensitivity to the drug.

Warnings: Caution patients about possible combined effects with alcohol and other CNS depressants. As with all CNS-acting drugs, caution patients against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving). Though physical and psychological dependence have rarely been reported on recommended doses, use caution in administering to addiction-prone individuals or those who might increase dosage; withdrawal symptoms (including convulsions), following discontinuation of the drug and similar to those seen with barbiturates, have been reported. Use of any drug in pregnancy, lactation, or in women of childbearing age requires that its potential benefits be weighed against its possible hazards.

Precautions: In the elderly and debilitated, and in children over six, limit to smallest effective dosage (initially 10 mg or less per day) to preclude ataxia or oversedation, increasing gradually as needed and tolerated. Not recommended in children under six. Though generally not recommended, if combination therapy with other psychotropics seems indicated, carefully consider individual pharmacologic effects, particularly in use of potentiating drugs such as MAO inhibitors and phenothiazines. Observe usual precautions in presence of impaired renal or hepatic function. Paradoxical reactions (e.g., excitement, stimulation and acute rage) have been reported in psychiatric patients and hyperactive aggressive children. Employ usual precautions in treatment of anxiety states with evidence of impending depression; suicidal tendencies may be present and protective measures necessary. Variable effects on blood coagulation have been reported very rarely in patients receiving the drug and oral anticoagulants; causal relationship has not been established clinically.

Adverse Reactions: Drowsiness, ataxia and confusion may occur, especially in the elderly and debilitated. These are reversible in most instances by proper dosage adjustment, but are also occasionally observed at the lower dosage ranges. In a few instances syncope has been reported. Also encountered are isolated instances of skin eruptions, edema, minor menstrual irregularities, nausea and constipation, extrapyramidal symptoms, increased and decreased libido—all infrequent and generally controlled with dosage reduction; changes in EEG patterns (low-voltage fast activity) may appear during and after treatment; blood dyscrasias (including agranulocytosis), jaundice and hepatic dysfunction have been reported occasionally, making periodic blood counts and liver function tests advisable during protracted therapy.

Supplied: Librium® Capsules containing 5 mg, 10 mg or 25 mg chlordiazepoxide HCl. Libritabs® Tablets containing 5 mg, 10 mg or 25 mg chlordiazepoxide.



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Division of Hoffmann-La Roche Inc.
Nutley, New Jersey 07110

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Overview

A Wrap-Up of the May and October 1974 Alumni Council Meetings

The report from the May and October Alumni Council meetings is being combined since some suggestions made at the earlier one were resolved or further considered at the later meeting.

The alumni fund books closed for '73-'74 one month after the May Council meeting, on June 30th. At that time, Dr. Walter reported that \$431,149 had been received so far. Of that total, \$196,378 was unrestricted gifts while \$234,771 was in restricted gifts. By the October meeting, Dr. Walter announced the overall grand total for 1973-1974 of \$533,467, which meant that an additional \$102,318 was recorded from May 29th through June 30, 1974. The restricted gifts numbered 435 and increased by \$48,229 to equal \$283,000 for the year, and the unrestricted gifts increased by \$53,622 to equal \$250,000, an increase of nine percent for the year. Dr. Walter commented that these figures showed fifty-six percent of alumni contributing from July 1, 1973 to June 30, 1974, an increase of seventeen percent over the last year. The average gift was \$72.

The revival of a student employment service, brought up at the May Council meeting by Dr. Walter, is now in operation under the auspices of the alumni office. The idea is to tap additional employment opportunities to try and offset the increasing financial burden for students.

At the May meeting, Dr. Robert Blacklow, Associate Dean of the Faculty of

Medicine for Academic Programs, recounted that the faculty council had not yet made much headway, due to protracted discussion of election methods and procedures. He also spoke about the new curriculum, which has eliminated total course integration and, with the exception of certain clinical requirements, requires no specific course. There is, however, a requirement for an area of concentration. Dr. Blacklow hoped that the creation of an effective advisory system will bolster the new curriculum.

The subject of admissions was taken up at the May meeting in light of the Alumni Survey Committee's recommendations, disseminated at the previous Council meeting in January. Dean Ebert appointed a committee of faculty and administrative officers to consider essentially three areas, singled out by the Alumni Survey Committee: simplification of admission process, a full-time director of admissions, and alumni interviewers. At that time, Stephen J. Miller, Associate Dean of the Faculty of Medicine for Admissions presented his own comments. He supported alumni being on individual sub-committees but questioned their use as independent interviewers outside the sub-committee because this might "deprive the student of a personal contact that may be important when the sub-committee reaches decisions". At the October session, Dr. Culver announced that admissions procedures will be changed, there will be a new committee, and Dr. Sargent

Cheever will become a full-time director of admissions. The subject of alumni offspring admissions was touched on at both meetings. It was revealed that thirteen out of forty-seven students were admitted but four did not accept.

The lion's share of both meetings was given over to a roundtable discussion of the role played jointly by students and alumni and how these two groups can interact for the greatest benefit of both. The Alumni Survey Committee spearheaded the report at the May Council meeting after they had acted as a sounding board for several "student activists". A number of student complaints, as related by chairman Dr. William Cochran, cited displeasure about "inadequate communications, excessive emphasis on marks, and an emphasis on bioscientific at the expense of biosocial subjects. They desire more evaluation of teachers, more feedback on their own performance, and are concerned that teaching is not adequately rewarded".

The impressions gained by Dr. Cochran's committee were that Vanderbilt Hall no longer unites a class socially the way it used to because it cannot accommodate the present student enrollment and its facilities are of rather well-worn vintage. It was subsequently learned at the October Council meeting that Vanderbilt is due for a refurbishing. Pursuant to the Alumni Survey report presented at the May meeting, this committee's task was to further explore "communication" and what troubles exist with it in the students' view. Dr. Cochran summarized students' alienated feelings that there is a lack of communication and that the faculty has let them down. His committee has drawn up a questionnaire to be distributed to students to elicit definite responses about various aspects and effects of Medical School life.

Mr. Leslie Greenberg '77, was invited to come to the Council's October meeting and explain the workings and aims of the Student Liaison Committee that was suggested by him and is now supported by the office of student affairs. He wants to put students in touch with alumni at an early stage in their medical school years. This provoked quite a few opinions from Council members on how such an undertaking would best be achieved. Mr. Greenberg does not want

too much structure to be superimposed on any prospective plan, for the sake of flexibility. He stressed that students have essentially one type of role model to emulate — that of the academic physician. What he hopes is for students to establish contact with doctors outside the Medical School-teaching hospital continuum. According to Mr. Greenberg, students would like to have the opportunity to follow the professional rounds of a physician in a rural setting, in community medicine, or in a normal private practice, for varying lengths of time. Dr. Culver responded saying that there are already alumni on hand who are willing to serve as preceptors and Mr. Greenberg's ideas will be tried on an informal basis to start with. Dr. Dunphy, president, appointed a sub-committee of Drs. Burwell, Hamolsky, and Shore to delve into possible configurations for student-alumni interactions.

The need appears to be to let students express themselves and be listened to by the powers that be — faculty, administration, and alumni. In this situation it is necessary to prevent an adversary posture from taking over and thwarting the idea of a constructive, open, and unrestricted forum. It was mentioned that students are often at pains communicating even with their peers, let alone faculty and alumni. From here, discussion at the October Council meeting ranged from the difficulties the basic science faculty faces in teaching material that first year students often fault as irrelevant, to the difficulty in arriving at a feasible definition of primary care.

Perhaps some of this dissatisfaction with communication can be cleared up since the Council, in reasserting its prerogative of alumni power, wants to make every effort to increase its influence on HMS policies and programs. In this regard, the Council intends to set aside a portion of the January 1975 Council meeting to engage in a parley with representatives from the basic science departments to "discuss the multiple problems related to their teaching and its influence on first year students". In addition, the Alumni Survey Committee will render a report on their investigation into student life and attitudes prevalent today at HMS. There will, no doubt, be more to come.

Alumni Day 1975

Class of 1945 – 30th
Joseph Miller, Chairman
John Bunker
Jack S. Parker
Warren Point
Isaac Taylor
Lester Tobin

Class of 1950 – 25th
Evelyn D. Waitzkin, Chairwoman
John C. Dalton
Richard Egdahl
Julius Goldblatt
Edward Mahoney
John V. Pikula

Class of 1955 – 20th
Roman DeSanctis, Chairman
Gerald Austen
Charles S. Keevil
Ronald Malt
Ernest Picard
Mitchell T. Rabkin
Eleanor Shore

Class of 1960 – 15th
Richard Kingsbury, Chairman
Joseph Barr
Jordan Cohen
Robert Fasciano, D.M.D.
William Gallagher
Ervin Phillips
Robert L. Shirley
Hugh Watts

Class of 1965 – 10th
Lesley B. Heafitz, Chairwoman
Nelson A. Burstein
William Couser
Clyde Crumpacker
Horst S. Filtzer
Charles Langston
Gary Poser
Arthur E. Reider
James Wallace

Class of 1970 – 5th
Cary Akins
Gerald Angoff
Anthony Brewer
Gary Kopf
Michael B. Millis
Stephen Raskin
John Warren

Class of 1925 – 50th
James M. Baty, Chairman
Stewart Clifford
Erwin C. Miller
Robert Palmer

Class of 1930 – 45th
David Wallwork, Chairman
Warren Babson
H. H. Hamilton
Arthur Hertig
Alfred Ludwig
John L. Newell

Class of 1935 – 40th
Lamar Souther, Chairman
Edmond Croce
Gordon Donaldson
Dale G. Friend
Joseph Holmes
Carroll Miller
John W. Norcross
Gordon Saunders

Class of 1940 – 35th
Rodney Larcom, Chairman
Robert E. Arnot
Archibald Deming
Thomas Gephart
William F. Hickey
Thomas Paull
Samuel Potsabay
Gordon Scannell

Film Series Portrays Boston Medical Leaders

Leaders in Boston Medicine

Films and Discussion

Countway Library – public invited
refreshments: 4 p.m.
program: 4:30 p.m.

sponsored by

Boston University School of Medicine
Benjamin Waterhouse Medical
History Society
Boston Medical Library

January 20, 1975

H. Baird Hastings

Discussants:

John T. Edsall, M.D., professor of
biological chemistry, Harvard,
emeritus

February 24, 1975

W. Barry Wood, Jr.

Discussants:

Lloyd E. Hawes, president, board of
trustees, Boston Medical Library
Peter H. Wood, Ph.D., research fel-
low, Charles Warren Center for
Studies in American History,
humanities consultant to Rockefeller
Foundation

Saul Benison, Ph.D., professor of the
history of medicine, University of
Cincinnati

March 17, 1975

John F. Enders

Discussants:

John F. Enders, Ph.D., Nobel
Laureate university professor, Har-
vard emeritus
Sidney Kibrick, M.D., professor of
pediatrics and microbiology (virology)
Boston University School of Medicine
Lawrence J. Kunz, Ph.D., associate
professor of microbiology and
molecular genetics, Harvard

April 14, 1975

Paul D. White

Discussants:

J. Worth Estes, M.D., associate pro-
fessor of pharmacology, Boston Uni-
versity School of Medicine
Edward F. Bland, M.D., clinical pro-
fessor of medicine, emeritus, Har-
vard, and senior consulting physi-
cian, Mass. General Hospital

This program is under the chairmanship
of G. E. Gifford, Jr., M.D., associate
professor of socio-medical sciences,
Boston University School of Medicine;
consultant to the historical collections,
Countway Library, Harvard; secretary,
board of trustees, Boston Medical Li-
brary.

The first three films were made by
Alpha Omega Alpha and the National
Library of Medicine as part of a series,
*Leaders in American Medicine, The
Autobiographical Memoirs of Eminent
Medical Scientists and Teachers.*

HMS Takes Part in Neonatology Program

The Harvard Medical School has joined
with Children's Hospital Medical Center
and the Boston Hospital for Women in
forming a Joint Program in Neonatology
under the direction of Dr. H. William
Taeush, newly appointed pediatrician-in-
chief of the Boston Hospital for
Women and assistant professor of
pediatrics at the Harvard Medical
School.

The neonatology program will coordi-
nate intensive care of infants, espe-
cially those who are sick, prematurely
born, or otherwise require special atten-
tion. It was organized by Dr. Mary Ellen
Avery, physician-in-chief at Children's
Hospital Medical Center and professor
of pediatrics at the Medical School.

Under the joint endeavor, the majority
of infants born at either hospital will re-
ceive special care there. The transfer of
those infants with highly complex medi-
cal problems occasionally will be made
when there is a concentration of
specialized equipment at one hospital
or another.

Alumni to Whom Credit is Due

The Bristol-Myers Foundation donated
two prizes of \$1,000 each that have
been credited to class agents Ladislas
(Edna) Wojcik '49 and H. Clement
Jurgeleit '66, as a result of their fund-
raising efforts.

The alumni fund office coordinated an
incentive program that began over a
year ago and ended with announce-
ment of the winners at the class agents'
dinner, September 30, 1974. The class
of 1949 "provoked the greatest in-
crease in per capita giving among the
classes from 1930-1964" and the class
of 1966 "achieved the highest percent
participation among the classes from
1965-1973".

Congratulations to Jose A. Sarraga '45
who fulfilled a regional agent's dream in
Puerto Rico. Figures tallied by the
alumni fund office show ninety-three
percent participation over the years and
ninety percent participation during
1973-1974 with the per capita gift av-
eraging \$115.

Alumni donations came from: Albert A.
Castaner '44, Jose R. Gonzalez '39,
Roberto J. Jimenez '36, German E.
Malaret '53, Victor A. Marcial '49, Antonio M.
Ortiz y Ortiz '29, Jose L. Porrata-Armstrong '44, Alfred Ramirez
de Arellano '50, Jose A. Sarraga '45,
and Raul-Celedonio Vizcarrondo '48.



Dr. Sarraga

Will the Real Dr. Bojar Please Step Forward?

The advertising industry may have at last persuaded a majority of Americans that the image is more important than the reality. Mr. Nixon, at least, seems to have been so persuaded, and his career demonstrates the dangers of such a limited perspective.

The September-October issue of the *Bulletin* was an exercise in perspective, in this case that of the students, or more specifically that of a number of members of HMS '76. Some may consider it a worm's-eye view of the apple.

Meanwhile, an old codger from HMS '46 looks at the cover and is reassured to see that Worth Hale is back in the office, looking interested and kindly in this instance. The codger doesn't realize that he has just been subjected to a thematic apperception test, and that others have reacted to it differently.

Technically the cover owes something not only to mosaic, but also to pointillism (imaging by means of sets of dots), découpage (cutting up photographs, more or less), op art (creating visual effects by means of grid patterns and the like), and television. Television imaging and its processing by computer have forced engineers to think about the minimum number of dots required to make a recognizable image. This involves information theory, a subject very much like thermodynamics (see *Scientific American*, Sept. 1971, p. 179 ff.). X-ray departments are very much involved with this sort of thing nowadays.

To return to Dr. Bojar. Where his head should be, there is what looks like a very poor television image, poor because the dots are very sparse. It looks as though a crude attempt at retouching had been tried without too much improvement. This is all terribly puzzling since the rest of the picture is a bit wavy but relatively clear.

This, apparently, is how Dr. Bojar tunes in on the TV set in the unknown interviewee's head. To HMS '46, a benign Worth Hale. Certainly a father-image, or more accurately a grandfather-image. Someone at least who is non-threatening, who relaxes defenses, and who can be talked to without fear.

But is it the real Dr. Bojar? Alumni may be reassured to know that he is younger than most of us, despite his venerable appearance on the cover, and quite able to relate to HMS '76 and beyond. Indeed his own article in "Perspectives" demonstrates this.

Alumni may also be reassured to consider that their own perspective of HMS may differ from that of '76 by just as much. The *Bulletin* will continue to present the faces of HMS, issue by issue, and as the dots collect on the screen we expect that not only a clear but also a vote-getting image will result.

G.S.R.



The real Dr. Bojar

Class of 1977

- Ackerman, Andrea
New Hyde Park, N.Y. (Yale)
- * Adams, David H.
Shaker Heights, Ohio (Princeton)
- Arnold, Andrew
White Plains, N.Y. (Brown)
- Augustyn, Damian H.
Seattle, Wash. (Stanford)
- Banks, Nancy T.
New York, N.Y. (Hunter)
- Banner, William P.
Washington, D.C. (Yale)
- Baruzzi, Kevin P.
Lee, Mass. (U. of Massachusetts)
- * Bedrosian, Camille L.
Malvern, Pa. (Radcliffe)
- * Berdine, Gilbert G.
Skokie, Ill. (MIT)
- Bernhard, Jeffrey D.
Buffalo, N.Y. (Harvard)
- Billings, Paul R.
Los Angeles, Calif. (U. of California, San Diego)
- * Blum, Richard I.
Huntington Valley, Pa. (Harvard)
- * Bockenstedt, Paula L.
Dayton, Ohio (Wellesley)
- Brem, Henry
Fair Lawn, N.J. (New York U.)
- Brewster, Joe C., Jr.
Los Angeles, Calif. (Stanford)
- * Brodie, Howard R.
Los Angeles, Calif. (MIT)
- Bucuvalas, John C.
Newton Highlands, Mass. (Harvard)
- Burke, Patricia Y.
Baltimore, Md. (Goucher)
- * Camazine, Scott M.
Scarsdale, N.Y. (Harvard)
- Carr, Phyllis L.
Niskayuna, N.Y. (Radcliffe)
- Carrillo, Margaret A.
Hato Rey, Puerto Rico (U. of Illinois)
- Casscells, Samuel W.
Montchanin, Del. (Yale)
- * Cassel, Douglas M.
Creve Coeur, Mo. (Yale)
- Charon, Rita A. M.
Providence, R.I. (Fordham)
- Cooksey, Helen S.
Berkeley, Calif. (U. of California, Santa Barbara)
- Corson, Janet L.
Ithaca, N.Y. (Radcliffe)
- Costa, Kathleen S.
Long Beach, Calif. (U. of Chicago)
- * Detsky, Allan S.
Toronto, Ontario, Canada (MIT)
- Donohue, John H.
Bronxville, N.Y. (Yale)
- Doorey, Andrew J.
Sharon Hill, Pa. (Princeton)
- Douglas, John M., Jr.
Charlotte, N.C. (Davidson)
- Drogin, Mark
Woodhaven, N.Y. (Polytechnic Inst. of N.Y.)
- Fels, Anna O.S.
Cambridge, Mass (Radcliffe)
- Felsenstein, Donna
Brooklyn, N.Y. (Barnard)
- * Fifer, Michael A.
Elmhurst, N.Y. (Harvard)
- Fisher, Frank B.
El Cerrito, Calif. (U. of California, Berkeley)
- Flowers, Mary A.
Montgomery, Ala. (Tuskegee Inst.)
- Force, Thomas L.
Vandalia, Ill. (Harvard)
- Fox, David A.
Montreal, Quebec, Canada (MIT)
- Franklin, Kenneth W.
Westbury, N.Y. (Amherst)
- * Freedman, Roger A.
Los Angeles, Calif. (Harvard)
- French, Christopher C.
Newton, Mass. (Brown)
- Friedman, Rohn S.
St. Louis Park, Minn. (Harvard)
- Frist, William H.
Nashville, Tenn. (Princeton)
- George, David L.
Wilkes-Barre, Pa. (Princeton)
- Gillick, Muriel R.
New York, N.Y. (Swarthmore)
- Gottlieb, Steven E.
Sepulveda, Calif. (U. of California, Los Angeles)
- Gropper, Adrian
Flushing, N.Y. (MIT)
- Harris, H. William, Jr.
Garden City, N.Y. (U. of Pennsylvania)
- Harris, Matthew S.
Philadelphia, Pa. (Harvard)
- Hartzband, Pamela I.
Westport, Conn. (Radcliffe)
- Haygood, Vanesse P.
Charlotte, N.C. (Stanford)
- Henneman, Cyrena S.
Cambridge, Mass. (Yale)
- Hernandez, Valentin
Torrance, Calif. (U. of California, Los Angeles)
- Hernandez, Vivian S.
New York, N.Y. (Antioch)
- Hirsch, Laurence J., 3d
Mamaroneck, N.Y. (U. of Rochester)
- * Ho, David D.
Los Angeles, Calif. (California Inst. of Technology)
- Hochman, Judith S.
Brooklyn, N.Y. (Brandeis)
- Hogan, Quinn H.
Madison, Wis. (Stanford)
- Hotchkiss, Linda S.
Detroit, Mich. (Radcliffe)
- Hughes, Robert A.
Littleton, Col. (Harvard)
- Huizenga, Robert J.
Rochester, N.Y. (U. of Michigan)
- Ingbar, David H.
Ross, Calif. (Reed)
- Isberg, Roberta S.
Miami Beach, Fla. (Yale)
- Kelleher, Maureen M.
Westboro, Mass. (MIT)
- Kern, Kenneth A.
Los Angeles, Calif. (U. of California, Berkeley)
- King, Thomas V.
South Wellfleet, Mass. (Harvard)
- Kipps, Thomas J.
Fresno, Calif. (Columbia)
- * Knirk, Jerry L.
Lansing, Mich. (Michigan State)
- Kopit, Sandra J.
Silver Spring, Md. (Radcliffe)
- Kupsky, William J.
Berwick, Pa. (MIT)
- Kuter, David J.
Fond du Lac, Wis. (Harvard)
- Kuter, Irene H.
Sutton, Surrey, England (Oxford)
- Lebwohl, Mark G.
New York, N.Y. (Columbia)
- Like, Robert C.
Babylon, N.Y. (Dartmouth)

- Liu, A. Hans H.
 Tuscaloosa, Ala. (Johns Hopkins)
- Long, Thomas P.
 North Bergen, N.J. (Columbia)
- Luce, Ronda F.
 Readfield, Me. (Colby)
- Mallaris, Ourania B.
 Chicago, Ill. (Radcliffe)
- Malotte, Carolyn L. H.
 Austin, Nev. (Chapman)
- Marder, Shelley R.
 Forest Hills, N.Y. (Brandeis)
- Marraccini, John V., Jr.
 Miami, Fla. (U. of Miami)
- Marrujo, Gregory
 Lakewood, Calif. (U. of California, Irvine)
- McFarlane, Robert F.
 Palestine, Tx. (Harvard)
- McKay, Raymond G.
 Norwell, Mass. (Harvard)
- Meadow, Patricia E.
 Canton, Mass. (Harvey Mudd)
- Mellins, Elizabeth D.
 Chestnut Hill, Mass. (Cornell)
- Michener, James L.
 Baltimore, Md. (Oberlin)
- Miller, Lawrence G.
 Baltimore, Md. (Harvard)
- * Minster, Jill G.
 Dayton, Ohio (MIT)
- Movsesian, Matt A.
 Forest Hills, N.Y. (Columbia)
- Mullins, William W., Jr.
 Pittsburgh, Pa. (Harvard)
- Munoz, David R.
 Whittier, Calif. (Stanford)
- Murphy, Mariette
 Brooklyn, N.Y. (Hunter)
- Murray, Katherine A.
 Wellesley Hills, Mass. (Wellesley)
- Narva, Andrew S.
 Chestnut Hill, Mass. (Harvard)
- * Newman, Ronald R.
 Cornwall, N.Y. (MIT)
- * Numata, Tetsuto
 Excelsior, Minn. (MIT)
- Okie, Susan M.
 Encino, Calif. (Radcliffe)
- Paolini, Domenic, Jr.
 Boston, Mass. (Boston U.)
- Pasinski, Roger C.
 Lowell, Mass. (Bowdoin)
- Perlman, Felice J.
 New York, N.Y. (Radcliffe)
- * Pinkston, Paula
 Memphis, Tenn. (Radcliffe)
- Plessner, Carol E.
 New York, N.Y. (Cornell)
- Podolsky, Daniel K.
 Southfield, Mich. (Harvard)
- Radford, Martha J.
 Baltimore, Md. (U. of California, Berkeley)
- Ratych, Roman E.
 Long Green, Md. (Loyola)
- Raux, Mary-Ellen J.
 Quincy, Mass. (Boston College)
- Record, George T.
 Brookline, Mass. (Harvard)
- Reed, Sharon L.
 Austin, Tx. (Stanford)
- Reed, Stanley D.
 Jamaica, N.Y. (MIT)
- Rigotti, Nancy A.
 Rockford, Ill. (Stanford)
- Rodriguez, Juan G.
 Eagle Pass, Tx. (Brown)
- Romero, Harry J.
 Hollywood, Fla. (Harvard)
- Rose, Lewis J.
 Merion Station, Pa. (Haverford)
- Ross, Michael F.
 Plainview, N.Y. (MIT)
- Rowe, Richard W.
 Chestnut Hill, Mass. (U. of North Carolina)
- Ruddock, Vilma E.
 East Orange, N.J. (Seton Hall)
- Rudlin, Craig R.
 Richmond, Va. (Princeton)
- Ruffin, Marshall deG., Jr.
 Washington, D.C. (U. of Virginia)
- *Safranek, Louis L., 3d.
 Omaha, Neb. (Harvard)
- Sanchez, Guadalupe
 Innokalee, Fla. (Berry College)
- Sanders, George H.
 Houston, Tx. (Rice U.)
- Scalza, Louis W.
 Warwick, N.Y. (New York U.)
- Schneider, Amy
 New York, N.Y. (Radcliffe)
- Sepúlveda, MarÍn-José
 Hartford, Conn. (Yale)
- * Silverberg, Alan L.
 Plainview, N.J. (Harvard)
- Siwek, Leland G.
 White Plains, N.Y. (Harvard)
- Skinner, David J.
 Convent Station, N.J. (Wesleyan)
- Slater, William R.
 New York, N.Y. (State U. of N.Y. at Stony Brook)
- Smith, Henry W. B., 3d
 Statesboro, Ga. (Morehouse)
- * Smith, William R., Jr.
 Jamestown, Ohio (Central State U.)
- * Solway, Julian
 Skokie, Ill. (MIT)
- * Spindel, Eliot R.
 Los Angeles, Calif. (MIT)
- Stark, David D.
 Malverne, N.Y. (Brown)
- Stefanyszyn, Mary A.
 Philadelphia, Pa. (U. of Pennsylvania)
- Steinberg, Earl P.
 Lincolnwood, Ill. (Harvard)
- Stern, David M.
 Great Neck, N.Y. (Yale)
- Stoeckle, Mark Y.
 Winchester, Mass. (Harvard)
- Storey, Eileen
 Berwyn, Pa. (Radcliffe)
- Strull, William M.
 Louisville, Ky. (Harvard)
- * Swartz, Mitchell R.
 Malden, Mass. (MIT)
- Tames, Steven M.
 Brooklyn, N.Y. (U. of Rochester)
- Taylor, Andrew D.
 Gainesville, Fla. (Harvard)
- Taylor, Clifford A.
 North Babylon, N.Y. (Harvard)
- Taylor, Hugh M.
 Farmington, Conn. (Harvard)
- Toomey, Kathleen E.
 Glenshaw, Pa. (Smith)
- Torres, Ivette B.
 Bronx, N.Y. (Pace U.)
- Townsend, Janet M.
 Berkeley Heights, N.J. (Tufts)
- Turner, Arnold F.
 Gary, Indiana (Stanford)
- Van Boeckel, Bruce A.
 Brooklyn, N.Y. (Yale)
- van der Horst, Charles M.
 Olean, N.Y. (Duke)
- Vinson, Billy M.
 Fillmore, Okla. (U. of Oklahoma)
- Waldinger, Robert J.
 Des Moines, Iowa (Harvard)
- Wallis, James B.
 Rhinebeck, N.Y. (Harvard)
- Ward, Frank T.
 Roxbury, Mass. (Harvard)
- Wasserheit, Judith N.
 New York, N.Y. (Princeton)
- *Weigle, David S.
 West Hartford, Conn. (MIT)
- Weiss, Stanley H.
 Brooklyn, N.Y. (Yale)
- Weiss, Walter R.
 Lexington, Mass. (Harvard)
- West, Catherine G.
 Playa Del Rey, Calif. (U. of California, Irvine)
- Williams, Patricia D.
 Summit, N.J. (Yale)
- *Wise, Elizabeth F.
 Evanston, Ill. (MIT)
- Yuan, Robin T-W.
 Newton Centre, Mass. (Harvard)
- Ziecheck, Debra B.
 New Carrollton, Md. (Lake Forest College)
- * Harvard-MIT Program

Privileges of Age

AT 10 YEARS

If I were old I'd have a gun
To put the red skins on the run
And shoot wild cats and buffalo
While riding on a swift bronco
If I were old.

AT 20 YEARS

If I were old I'd have a car
To smash all records near and far
And Sally M. would go with me
Or maybe fellers, two or three
If I were old.

At 30 YEARS

If I were old I'd have a biz
I'd speed it up and make it whiz
And all the other bosses round
Would be left flat upon the ground
If I were old.

AT 40 YEARS

If I were old I'd have a shack
Made for comfort without lack
With rooms of green and rooms of blue
And servants, halls and ballroom too
If I were old.

AT 50 YEARS

If I were old I'd have a club
To change me from a golfer dub
I'd give a swing and hit the pill
'Till it were lost o'er yonder hill
If I were old.

AT 60 YEARS

If I were old I'd have a yacht
To sail the seas the geography taught
I'd visit China and Siam
And Africa's shores and Hindustan
If I were old.

AT 70 YEARS

If I were old I'd have some books
To carry off to shady nooks
I'd read some Dickens, Wallace, Poe
Some murders dark and some Thoreau
If I were old.

AT 80 YEARS

If I were old I'd write a book
And tell them e'er in life I took
My honest place and played the game
And never caused my forebears shame
If I were old.

AT 90 YEARS

As I am old, and weak of knees
I'd see a hundred, if you please
Though bent of frame and dim of sight
A hundred please, before the night
Tho' I am old.

Happy Birthday Dr. Griffin

When Walter A. Griffin '00 penned these words in 1935, he probably did not envision ever tacking on a final verse, "At 100 years." But even at age 100, Dr. Griffin is a practicing physician, although he thinks that everyone else thinks he is too old. Nevertheless, he can be found at his office in a turn-of-the-century white frame house on Sharon, Massachusetts's Main Street—across from the First Congregational Church where he still sings tenor in the choir, and the library where he has full view of the passers-by. His office hours are daily from 1:30 to 3:30 and from 7:30 to 9:30, but, cautions his vibrant wife Helen, "He has always planned to have some time on Wednesdays to himself, calling that his day off. Sundays he is in his office, too."

Sunday, September 29, however, was an exception. At noon the church bells pealed 100 times, and later that afternoon Dr. Griffin was the town's guest of honor at a belated celebration of his 100th birthday (it was August 22). Dr. Griffin is quite near to being a legend in Sharon, if only because he has made the ordinary extraordinary. He has practiced there since 1901 as, he says, "a plain, common, ordinary doctor." Dr. Griffin first came to Sharon to serve on the staff of the local sanitarium (tuberculosis) for three months with no plans to stay. He never made plans to leave either, as it turned out, and has spent sixty-six (from 1908) years as school physician and his life as an ardent public benefactor. One of his magnanimous acts was in 1930 when he gave "all I had — \$10,000 — to build a playground that after it was fixed up, nobody seemed to want. But then the

high school was built near it and they used it," and that pleased Dr. Griffin.

His memory is remarkably good but, he sighs, "not as good as it used to be." It was either in 1912 or 1915 that he sojourned to Europe for a walking trip with several companions through Germany and also to Andorra. That did not seem like anything unusual, though. Neither did reaching the august age of 100 make Dr. Griffin one wit less than humble and very, very soft-spoken about his accomplishments. In 1897 he received his baccalaureate magna cum laude from Harvard after only three years of study. "I had one half course left to finish," he remembers, "and I just went to the dean and told him I wanted to go to the Medical School and couldn't I take that remaining course simultaneously?" The dean acquiesced, and Dr. Griffin completed his medical education in three years' time, too.

When I asked the inevitable question, "How does it feel to be feted at 100 years old?", he shyly uplifted his cherubic face and gave an imitable shrug — "It was a very fine celebration." He wants no part of publicity seekers and consented to this interview only because his alma mater, Harvard, is special to him. A number of familiar political persons plus several thousand Sharon inhabitants converged on the rustic surroundings of the Sharon Community Center for speechmaking, enthusiastic singing, and expressing gratitude to Dr. Griffin. Panegyrical greetings were read from President Ford and Senators Kennedy and Brooke. Conveying appreciation from venerable institutions were U.S. Con-

For He's a Jolly
Good Fellow



Dr. Griffin and his wife Helen arrive for the festivities.

gresswoman Margaret Heckler, Lt. Gov. Donald R. Dwight, State Senator Joseph Timilty, and Harvard's Dr. Claude Welch, among others, including some town notables who had been delivered by Dr. Griffin himself. He responded to this show of affection by saying, "I've done what I could to be a good citizen. I hope I shall continue to be a good citizen."

Now, the armload of plaques, citations, awards, and resolutions, all extolling Dr. Griffin's virtuous service to his town and its people for 73 years, have been neatly arrayed in his office, for visitors and well-wishers to look upon. The afternoon sun illuminates his office and his benign expression radiates a palpable, human warmth. He was quite touched by the scholarship fund that the Civic Foundation, which was established by him in 1930, is setting up in his name for a Sharon High School senior who intends to study either recreation or medicine. He was also ceremoniously made a Norfolk County Deputy Sheriff and will be sporting an official badge.

Dr. Griffin contents himself with an hour's ration of daily exercise. Looking out of his office window, he pointed to the pile of brush that he had cleared away after the final weeding of the garden. He dutifully plants his garden with assorted vegetables and laments that the problem with potatoes is that "the weeds grow so fast." Before the automobile, he used to travel to sick patients in a horse and buggy. Now he prefers to walk to his destination, although aided by a cane because of the fall that broke his hip two-and-a-half years ago. He even wanted to walk the couple of miles to his birthday party but was persuaded to arrive as the guest of honor should on such an occasion, escorted by the town police.

His dicta for staying healthy are basic enough: no smoking, no drinking, and regular exercise. He is a dear man who has a youthful alacrity — as when, all of a sudden, he rises to say goodbye and first muses, "everybody's taller than I." Dr. Griffin is all that one who is a centenarian should be — disarmingly modest. "Do people change?" I query. "People are still human," he replies. "You're born. You live. You die." A witty poet in years past, he is known to be short on the spoken word but long on wisdom. And maybe that is how one lives gracefully to 100 as he has. Happy Birthday, Dr. Griffin, from your fellow Harvard alumni!

The Boastful Bugs

A bad typhoid bacillus
Went swaggering in the milk,
And there he met a coccus and his twin
As smooth as silk.
"Hi! There! You simple cocci
You think you're pretty smart
When you sit upon a tonsil
And throw in your little dart.
You know your game's soon over
You're thrown against your will
And three to seven days staying
Will rarely make a kill.
Now I may have a month
Or sometimes two or three
To live in Peyer's patches
And enjoy my little spree."
He spat a little poison juice
And he wriggled with delight
To think how he had downed them
With recital of his might.

The cocci humbly bowed down
and blushed for very shame
Acknowledging their smallness
And powers so very tame.

"We know we're not your equal
We're simple little dots
They call us streptococci
And our nests are septic throats
But sometimes we can hitch-hike
Into a joint or two
And then we make a racket
Before our job is through."
They modestly withdrew a bit
As the bacillus gave a roar.

But, when he looked around again
The twins had changed to four.

Near by there stood Spirochaete
All twisted sore with age
He blinked a scornful eyelash
As he spoke up like a sage.
"You boastful youngsters get my goat
A-telling what you do
In disturbin' mortal bein's
In a week, or month or two
Why! I just sticks within 'em,
A-hidin' here and there,
An' I can cook up troubles
Even in teeth and hair.
A month, forsooth! I'll hardly start
A fussin' in that time;
But, maybe in a year or two
I'll start a little crime.
I'll cripple here, dull senses there,
Make one a lunatic,
But best of all to babes unborn
I'll turn a dirty trick.

And babies' babes will have my mark
As time goes rolling on.
A prince, a queen, a poor man's son
I treat 'em all as one."

The Bacillus and the Coccoi four
Made up a wreath of slime
And hung it on the Spirochaete
To stay there for all time.

Walter A. Griffin
29 September 1934



Below: It's the final turn before the Griffins reach the podium and the well-worn Harvard chair that awaits Dr. Griffin. Right: Michael Ahearn joshes with Dr. Griffin before leading a spirited rendition of Happy Birthday.



Left: Young and old gather around Dr. and Mrs. Griffin as they make their way up the ramp. Right: The first piece of the six-foot cake baked by Sharon High School students goes, of course, to the guest of honor!



Claude E. Welch '32 presented Dr. Griffin with the hand-written scroll from Harvard president Derek Bok and read the inscription:

Walter Alden Griffin — Physician
Harvard College 1897
Harvard Medical School 1900

One who has lived five score years is a matter of wonder to his fellow mortals. But to have lived them as you have with generosity and concern for your fellow man is indeed exemplary. Your University takes pride in sharing in this day of celebration in honor of your 100th birthday and of your long service to your community and to your profession. I send you greetings from your college and your medical school and assure you of Harvard's affectionate concern.

Derek Bok



Class Day 1974

Valediction

by Dean Robert H. Ebert

In the past I have chosen rather general topics for my valedictory remarks and have spoken about the responsibilities, challenges, and rewards associated with the degree of Doctor of Medicine. This time I will be much more specific and will share with you a deep concern I have about the financing of medical education by the federal government.

My concern is for the future of the so-called capitation grants to medical schools in this country. In 1972 the present administration introduced a radical departure from the federal government's past policy of fiscal support for medical schools and did so with relatively little fanfare. Simply stated, the federal government for the first time adopted a policy of direct support of medical education. The mechanism was the capitation allowance providing each medical school with approximately \$2,000 for each medical student enrolled, with a bonus for each additional place provided in the entering class. Clearly, the intent of this allowance was to increase the size of medical schools, and to become eligible a medical school had to demonstrate that it had increased in size. Nevertheless, the principle of direct support was even more important than the intent, for it provided unrestricted funds that could be used without subterfuge for the primary mission of the medical school — namely, the education of medical students.

Past public policy had always been based on the add-on principle. In other words, support of research, research training or the training of certain specialties would add to the resources

of the medical school and improve the quality of teaching. But teaching was considered a secondary gain and the federal establishment always made it clear that they were buying research and research training and not medical education. This is why the principle of direct support of medical education is so important.

And now the very administration that can take credit for this important departure in public policy appears ready to abandon it largely due to pressure from the Office of Management and Budget. According to the *Washington Report on Medicine and Health* (May 13, 1974), "HEW health officials are drafting a new health manpower education bill for submission to Congress that will suggest a 'phase-down' of capitation support and will propose that medical students pay more of the cost of their own education A phase-down of capitation support would give schools time to make necessary financial adjustments." Secretary Weinberger and Assistant Secretary Edwards have supported the principle of capitation allowances, but have been under continuing pressure from OMB to discontinue them and now appear to have lost the battle. "Phase-down" sounds suspiciously like "phase-out."

Why is this principle so important? Largely because the intent is to make the medical student bear more of the cost directly. Medical schools will be encouraged to raise tuition charges and programs for student loans will be expanded. Superficially, this may appear to be an equitable solution since physicians are high earners and therefore

the argument is made that the education of physicians should not be supported from tax dollars. But there are some highly undesirable consequences of such a policy.

- Many of you are in debt now as the result of your medical education. How would you respond if that debt were tripled or quadrupled? The answer is simple. You would be forced to search for the most lucrative career in medicine you could find. I submit that physicians motivated by indebtedness for their medical education are not in the best position to respond to the very real social challenges of medicine.

- The specter of a larger debt at the conclusion of one's medical education will be an active deterrent to all poor people who wish to study medicine. Medical schools have only begun to respond in a meaningful way to the educational needs of the minorities including poor whites. A policy of high tuition with the expectation that it would be paid for with federally guaranteed loans would set back the clock and by default, exclude many of those economically disadvantaged from the nation's medical schools. At a time when competition for medical school admission among undergraduates has become cutthroat it would be tragic to add fiscal competition.

- It is likely that some sort of national service will be offered as a means of debt forgiveness. This is a discriminatory approach since it allows the affluent student to escape national service if he or she so desires. If there is to be a national service requirement tied to payment for medical education, it should be levied on everyone.

All of you can think of other reasons as cogent as these — and some more so — for damning a policy that increases the debt load of the student. You are in the best position and I hope that some of you will speak out.

A Touchstone for Medical Education

by Lawrence L. Weed

Professor, College of Medicine, University of Vermont



I believe that your own medical record should be the basis for structuring medical care, medical education, and much of clinical investigation and research. In my opinion it is important for doctors and patients alike to explore how and why this is true.

The idea that there can be an unexpected harvest from an organizing principle in any field is accepted by most; but to use a simple, unsophisticated, bureaucratic detail — that nuisance item, the patient's medical record — as such an organizing principle is where the debate and confusion arise. The idea that the patient's medical record be given this role has startled some, bored some, pleased some, and infuriated others. But a framework does emerge as we make medical records a centerpiece, and it does allow lay-people, practicing physicians, all medical personnel, educators, and investigators to relate to one another in more meaningful ways.

To explain, let me begin with the word "responsibility." The ultimate outcome of a medical education should be a highly responsible physician or investigator and then the right school or prizes at graduation would be nice, but unnecessary.

But to say you want someone to be responsible is not a trivial matter. Responsibility cannot be attained unless an individual knows exactly what is expected. What do you expect from doctors and nurses? How do you expect them to set goals with you about your health, remember your problems, keep up on medicine, and communicate with

one another as specialists as they try to be responsible for your total care as an individual?

When you are well, you may never think about these details; when you are sick, you may focus on yourself and have a child-like faith that the doctor and nurse will know what to do and see that it gets done.

But we all can think about these issues when we are well, and there are useful facts we all know and can use in thinking about what we expect from the medical profession. For example:

- Doctors do specialize — orthopaedic surgeons, general surgeons, hematologists, cardiologists, foot doctors, mind doctors, and on and on. No one has ever taken complete care of a patient — taken out the cataracts, pinned the hip, diagnosed porphyria, handled the depression — and cared for each as well as an expert would.
 - Yet we also know that a uterus or an eyeball or a renal tubule does not come in all alone. Each comes in with a patient who may have high blood pressure or diabetes, be on drugs that interfere with anaesthesia or other drugs, or have social or mental problems that cause disease or interfere with recovery — a delicate web of life, not to be torn apart with impunity because the doctors found it necessary to specialize.
 - We know, or think we know, why doctors specialize. First of all, to become good at a manipulative or
- manual procedure, it is important to focus on it and do it over and over again. This precludes doing too many other things. Also, there is a mass of medical knowledge and doctors have tried to learn it, memorize it, and know it. They examine one another with National Board Examinations, specialty examinations, self-assessment examinations, and so forth. They leave the young people with the distinct feeling that you must carry everything in your head, and if this doesn't work in a big area — specialize, but at all costs try to pass those boards. The first two years of medical school are particularly knowledge oriented. As one fine physician and investigator, Stuart Graves, recently wrote about his first two years of medical school, "I was struck at the purely intellectual level at the oddity of medical school. There were hour lectures copied verbatim in notebooks all around me and repeated closely in the expensive texts I had purchased — rounds of lecturers who came and went with each 'new' section of study and whose lectures themselves sounded like the hundredth Hail Mary of an infinite rosary."
- We also know that the human memory is fallible, and that for the long pull memory is usage, not IQ, not interest, not Phi Beta Kappa keys. If you have a rare disease you do not want a doctor who has merely passed a set of exams dealing with basic or common facts but one who has passed some sort of an exam that proves the doctor can solve any

problem and can always be responsible to you. You do not want the feeling that you'd better have a disease that was in the 82% correct category when he or she passed that board on bones and joints, or on hematology in 1969.

To summarize:

- Doctors specialize;
- Patients do not specialize;
- Doctors try to memorize and develop memory-dependent systems; and
- The human memory is fallible — physicians forget facts in medicine and they forget crucial facts about the patient, too.

From the above ideas alone it is natural that a graduate should wonder — should one become a generalist trying to take care of the whole individual and wake up at age 40 feeling superficial, or should one become a specialist and wake up at age 40 feeling irrelevant? And the answer is that each must do what he or she can do well and specialize to the extent that is necessary to do a competent job, and then work effectively with others to create the fabric of total care. To do this physicians must communicate with others. How do they communicate among themselves to take total care of you? How do they communicate with you? How does the physician communicate with him or herself over time?

We know from what we have just said that they cannot do it successfully using just the human memory so they are left with the medical record. The record should contain a base of information gotten at regular intervals that doctors study to make a complete up-to-date list of problems. They should have a plan and careful progress notes for each medical problem. There should be one record available to the patient and all the doctors involved, and that record should always be up to date — the right hand should always know what the left hand is doing. The doctors who enter material in that record should be thorough, get all the facts before making decisions, be reliable, see, hear and feel without mistakes, be analytically sound, make good plans for each prob-

lem, common or uncommon, looking things up when they do not remember. The doctor should be efficient and set sensible priorities, so that a few people do not get all the medicine and others none.

Now if we had a school based on rules and records, what would the graduation be like? Must each graduate have evidence with records in hand that he or she was completely thorough and reliable and did straight thinking on all patients, no matter how few or how many, after four years? Or shall we say that each student should have one hundred patients, each up to a certain standard, and we shall make time the variable and have all of them graduate at different times — each according to when he or she is ready. In other words, should we make time the variable and achievement the constant, or achievement the variable and time the constant? Shall we run it like an instructor runs a ski slope — moving people on when they are ready; or should we run it like a grade school, where we move them all on after a given amount of time, ready or not, and give prizes to the ones who seem the most ready.

Let us assume for the moment that we can make good performance our goal — and let us turn to the issue of what is the best preparation for achieving high standards of performance. A faculty could set up an institution in which the system is well defined and the medical record is the central tool and the whole operation is delivering care in an organized manner. The students could then be brought in and told for the first two weeks to observe precisely what is going on. They then could be instructed to begin to learn, step by step, how to get the basic information, that is, histories, physicals, and lab work that must be studied in order to formulate the patient's problems. Each would be given jobs in those areas where they would draw blood, take histories, do physical examinations, and so forth. They would be given a meta-structure of questions that are common to any task and asked each evening to read about the task in terms of those questions. They should write the answers on paper. For example, if it were a blood cholesterol they had been drawing in the morning they should read about what it is, what is normal, what makes it go up, what makes it go down, and so forth.

At first they would have trouble struggling to find books and answers on their own. But no one should do it for them. They would give their written answers to instructors who would audit them. They would be told to go back again and again until they got the answers right. They would not be asked to memorize anything. The teacher's main function would be to say whether they were doing it right or wrong, and if wrong go back to movies, books, audio-visual aids and various people in the institution actually doing the work. That is, go back to any of those sources and figure out how to do it right and come back again. After they had demonstrated that they could get all the data reliably and write down answers that made sense and that they understood, they would be asked to start putting down a crude problem list. They would then bring the problem list to their instructor, who would tell them whether it was good or bad, and then tell them to repeat it if it was bad. The same approach would apply to detailed plans for the problems and the careful following through on each of those plans. At all times the students should let the natural biological situation lead and not only the natural biological situation, but the total social and economic situation from the patient's point of view. After the students had done a sufficient number of patients completely, they could then ask to have their work reviewed to see if they were adequate as problem solvers and decision makers. If so, they could go out and assume some responsibility on their own. Now there are basic assumptions to this approach, upon which success depends, so these must be examined critically:

- There is the assumption that the institution has defined comprehensive and episodic care for the people that come to it and moreover, is actually giving the kind of care it is trying to teach. Students learn incredibly fast when there is something clear to emulate.
- There is the assumption that students can find information on their own, using books and aids of all kinds — a heart simulator for a strange heart sound or sophisticated books and articles in immunology for a difficult transplant patient, and can do all this without an elaborate core of facts and vocabulary. In other

words, students actually believe what they told them when they graduated from first rate universities — that is, that they have learned how to learn.

- There is the assumption that problems rigorously pursued will naturally organize information for students; that the faculty does not have to set up detailed organized approaches to knowledge.
- There is the assumption that the teacher is a disciplinarian and an auditor, not a dispenser of information — like a good coach who watches and directs but rarely jumps in the pool and swims. Each faculty member teaches a core of behavior — thoroughness, reliability, a sound analytic sense, and efficiency — no matter what the task.

Now there is another alternative that the faculty may choose. They can spend one or two years transmitting a core of knowledge that they believe will facilitate solving future problems. They can give bits of "hands on" experience with patients on specialty wards where students, house officers, and attendings together weave a fabric of care with varying mixtures of writing, talking, and follow-through. They can give written examinations on the knowledge or simulated problems and have various older people write opinions of students as they work together on bits and pieces of total patient care. The assumptions here are:

- Students need help in getting a base of knowledge and the faculty can decide what the magic base should be. And having gotten it, students will remember it and integrate it effectively into a fabric of highly organized total care.
- It is necessary for the faculty to organize knowledge and personally transmit portions of specialized technique. Nature does not organize knowledge as well as an academic faculty does through real problems rigorously pursued and documented.
- For students to learn certain knowledge they have to be taught it; thus post-graduate courses and lectures are given their permanent lease on life.

The choice is between the above two educational alternatives. In one, the teacher is an auditor determined to develop a core of behavior in a student — problem solver — the user of tools — resourceful — undaunted by any problem. In the other, the teacher is a recognized expert in a given field — a transmitter of knowledge in that field — the ultimate performer — the shrewd creator of examinations that simulate reality — the proud parent of the person who knows all the answers, passes all the proper boards — dropper of pearls — a person proud of credentials and of past traditions — the believer in memory and thereby the unwitting catalyst to specialization.

The choice is not trivial, and in my view has prognostic implications not only for medicine but for the university as a whole and the relationship of the university to society. For those who would

stein, commenting on a short period he had to spend in school preparing for a degree examination, said that as a consequence for several years afterward he was unable to do any creative work. Or as Margaret Mead put it more succinctly, "My grandmother wanted me to get an education so she took me out of school."

We must remove the encrustations that have grown up around the words "academic" and "intellectual" and stop identifying them with approaches that are dead and non-productive. I believe we must choose the problem solver approach to education, and in medicine the principal tool we need to do this is the patient's problem oriented medical record. It is the tool whereby this can be done. It is the answer to Foucault's criticism that "the entire technological and pedagogical reorganization of medicine faulted on account of a central lacuna; the absence of a new, coherent, unitary model for the formation of medical objects, perceptions, and concepts. The political and scientific unity of the medical institution implied for its realization, a mutation in depth." And a mutation in depth involves major changes such as teaching a core of behavior instead of a core of knowledge. It means teaching students to be thorough, reliable, analytically sound, and efficient as opposed to teaching a body of facts to be memorized. Those behavioral traits sound like Sunday school platitudes when talked about in the abstract, but when dealt with in terms of the rules of the problem oriented record, they become very real and very much alive. They allow us to escape from the tyranny of the memory and develop a truly new curriculum.

"The most powerful of all medical and paramedical personnel is the patient — and there is one for every member of the population."

say that the university as now constituted is intellectualism at its best, and for those who would say that the first alternative above described for education is but a bit of anti-intellectualism and a return of the old faults of an apprenticeship, I would remind them of what Alfred North Whitehead said about this issue: "Firsthand knowledge is the ultimate basis for intellectual life. To a large extent book learning conveys secondhand information and as such can never rise to the importance of immediate practice. What the learned world tends to offer is one secondhand scrap of information illustrating ideas derived from another secondhand scrap of information. The secondhandness of the learned world is the secret of its mediocrity. It is tame because it has never been scared by facts." Ein-

After watching medicine for the last 25 to 30 years, it has appeared to me as a massively uncoupled collection of brilliant isolated steps — it has been fully a spectacle of fragments of intentions, to use Le Corbusier's phrase. One could not, nor would one want to deny the genius that has gone into the understanding and creation of each part, but that is not good enough. We need the chess men, yes, each carved beautifully, but we need some rules and we need a chess board to play the game. To even suggest that playing the game and winning every time is less of a challenge or less of an intellectual achievement, to say nothing of a humanitarian

achievement, than just to carve the chess men alone, is to have a complete misconception of what the human mind can and must do. Without the organizing principles, without the chess board and the rules, real work cannot become a curriculum and elective time may become little more than anxiety or waste. It is possible that we have arrived at our present educational paradigm not through choice between two logical and available alternatives, but rather by default. We are talking about pieces and transmitting knowledge because we do not have the tool to do the alternative. We have studied nature and seen how a cell has DNA and control mechanisms. When are we going to fashion a DNA and some control mechanisms for ourselves?

This is why the record needs to be changed and made a focal point. Before there were multiple records on an individual and each was a medical Tower of Babel. We need a medical record that is complete and represents the logic of relationships among pieces of data as well as the pieces themselves. We want the student to learn to work with those relationships in a responsible manner. This is no trivial task. Thomas Jefferson recognized the infinite relationships among things in the field of medicine. In 1807 in a letter to Casper Wistar, Jefferson wrote, "The disorders of the animal body and the symptoms indicating them are as various as the elements of which the body is composed. The combinations of these symptoms are infinitely diversified and I would wish the young practitioner especially to have deeply impressed upon his mind the real limits of his art. His mind must be strong indeed if in rising above juvenile credulity, it can maintain a wise infidelity against the authority of his instructors and against the bewitching delusions of their theory." And it is data properly organized and under the physician's control that will give the student the strength to deal with the pressures upon him or her — and that data must be in the patient's record.

Isn't this what Claude Bernard saw when he said, "In teaching man experimental science it results in lessening his pride more and more by proving to him every day that primary causes, like the objective reality of things, will be hidden from him forever, and that he

can only know relations." Real work and real data are the only immunization the students will ever get against the generalizations and misconceptions of those who teach them. Here is the one goal of all the sciences. We must let real work do this for students right from the outset and we must avoid what Tolstoy has called "the snare of preparation."

The development of the mind and the profession through real work requires goals and rules, and all examinations and evaluations must be in terms of real work. Real work has failed in education when used in the absence of rules and goals and when divorced from the final examination. The student is not a fool. He or she wants to pass and knows where to put the effort. Instead of recognizing the reasons for failing and correcting them by developing the right goals and tools and new examination structures in terms of the work actually done, we degenerate into disseminating knowledge with rounds, grand rounds, and lectures — a sort of massive adult show and tell. A bottomless pit. Furthermore, since the patients themselves do not know the rules they cannot help us in our dilemma. They cannot do the enormous percentage of the work of which they are capable in medical care. The most powerful of all medical and paramedical personnel is the patient — highly motivated, not costing anything — even willing to pay — and there is one for every member of the population.

Over and mis-utilization of medical care are becoming two of our worst problems, and in my opinion they cannot be dealt with successfully without the patient's help. The patient must see documented for him or herself what does not work. The world of research must recognize and understand a highly disciplined approach to medical care — a framework in which they can drop their pieces. It must have been glorious in the middle ages when they were building cathedrals — every worker could stand back at the end of the day and see not only what he was doing but where it fit with the efforts of others to make a glorious whole. He did not carve a beautiful cathedral door all day and have no idea of where it was going to go or worse yet, see it thrown in a muddy stream to float away into nothingness. If he had, he would either

have stopped carving doors altogether or started making ones that were not worth much.

We must see the whole — the global view. The public does understand the need for specialization and for research. What they do not understand is why the basic research of 30 years ago does not reach all the people it should at the present time. Why should they believe that what we call basic research of today will ever add up to more than problems like pollution and war instead of better care for the patient next door who cannot even get a doctor? Patients question our sense of responsibility. They are afraid we are capable of magnificent navigation to the wrong port. They know the uniqueness of their own lives and for medical care to have meaning it must have a wholeness to it — and it is so easy for us to play with the pieces and give each other prizes for dramatic achievements as we define them.

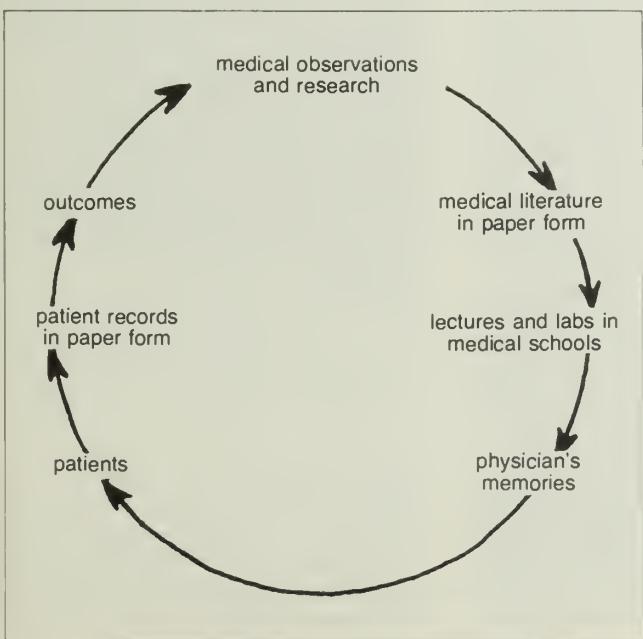
Going from long preparation and study to putting the pieces together successfully is not easy. It reminds me of one of the characters in Saroyan's "Bicycle Rider from Beverly Hills", who got to the point of writing what he really wanted to do after preparation — and what did he find? It was not easy, and as he said, "The foolishness of my writing in comparison to what I wanted to write infuriated me for years. Greatness, greatness, greatness is what I wanted. I was long years discovering the secret that it is not necessary for anything one writes to be instantly great — the important thing for man is to resign himself to the truth that he is only a man and to work." And I might add that all we need to provide as a faculty is the framework and rules within which all can work so that a sense of real achievement is possible. It was with this spirit that we, at the PROMIS Laboratory in Vermont, designed and tested for a year with two college students, a new curriculum that the faculty voted for in principle (sixty percent) but against its immediate implementation (fifty-four percent).

If we persist in believing that we can ascertain the ideal core of knowledge and then teach it and examine for it before the student has embedded in his or her mind the goals, the methodology, and the questions of medical practice,

then we shall corrupt the student's ideals and the very habits of thoroughness, reliability, logical thought, and efficiency that responsible medical practice and scientific inquiry require. Most schools and colleges today, particularly the so-called better ones, over-teach and give more than can be assimilated and accommodated rigorously, as Piaget would say. By so doing for most students, education actually prevents the secure development of a reflective, disciplined, and courageous mind that will refuse to do work halfway and half understand just for the sake of moving on to a required number of courses in a fixed time. Students are ashamed to have to repeat something until it is elegant. In other words, we can actually inhibit the development of a sense of initiative, discovery, and above all a sense of responsibility. Like a drug, education has toxicity as well as benefit, and good intentions in the name of scholarship do not undo the damage to society of an overdose of any treatment, right or wrong.

We teach them the facts of basic science, as the behavior of the scientist escapes them. As Stuart Graves has written, "The mere pretentious transmission of information can lead to the ultimate in intellectual buffoonery and condescension", but as he also states, "With medical institutions structured as they are, few can face them day after day without condescension's shield."

The old route



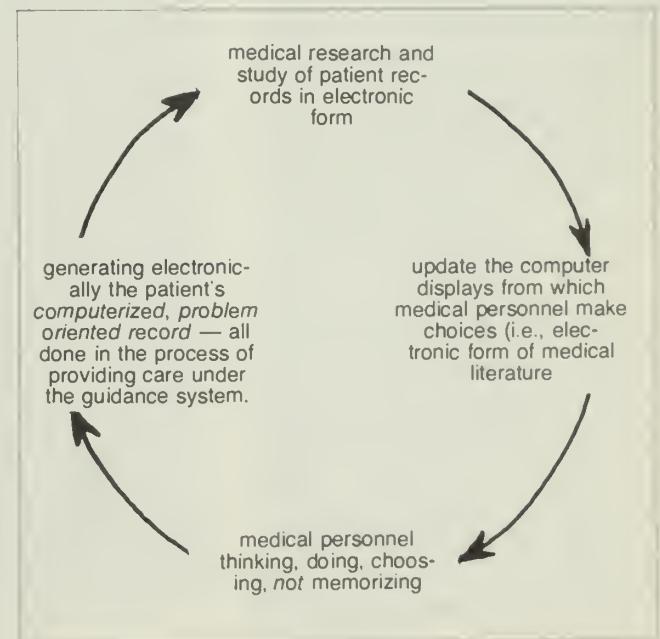
The medical student is taking on faith the universe of information we give, and yet intuitively realizes that any system without a feedback loop runs wild. The final reality of students' existence must meaningfully mesh with the world of information without dependence upon human memory. Feedback loops must be complete and reliable. The old route has been a series of steps that has led to much that has been brilliant and good, but also at times there have been losses and distortions at each step and at times the steps have become uncoupled completely. Computers can now enter into this series of steps, and they should be considered an extension of our minds like automobiles are extensions of our muscles. They allow medical literature to be in electronic form, organized around patients' problems and conveyed as a series of displays on a touch-sensitive TV-like terminal, from which medical personnel make choices that flow together to generate, at that moment, the patient's medical record in electronic form — making possible an immediate availability of information upon which coordinated care depends. With the new route the very tools the medical personnel use to do their work can have built into them the parameters of guidance and currency of information to do that work correctly. The new tools have come along just in time, because responsible medical care for all the people, medical education and medical research have become dangerously

uncoupled — leading to broken corrective feedback loops and loss of control.

And if the worlds of action and knowledge do not connect easily and securely, then the good students become cynical and distrustful. They become distrustful, in Foucault's phrase, "of those faculties which recognize that which is true and intellectual only in theoretical structures and who turn knowledge into a social privilege." The students want to pass the examinations that life and not the faculty sets for them. Examinations, as William James said, "that reveal those students whose passions are stronger, whose purposes are more worthy, and the combining power of whose mind is less commonplace".

And the poorer students who do not become distrustful become imitators; they begin to collect and learn in a mindless fashion. There are those, as Claude Bernard has said, "who by nature are metaphysical and proud. They go so far as to think that the idealistic creations of the mind which correspond to the feelings also represent reality". They are the ones who become the doctors who quote what is in the book and deny what is in the bed. And they keep either no medical records or a source oriented one that does not preserve their logic and that offers little coordination of care, so that in this way their semi-autistic thinking can go on uninterrupted.

The new route





Students need real goals, with real work, and real rules to work by as they develop their talents. Listen to Whitehead again, "Theoretical ideas should always find important application within the students' curriculum." This is not an easy doctrine to apply. It contains within itself the problem of keeping knowledge alive, which is the central problem of all education. We are dealing with human minds, not dead matter. The evocation of curiosity, judgment, of the power of mastering a complicated tangle of circumstances, the use of theory in giving foresight in specialties — all these powers are not to be imparted by a set of rules embodied in one scheduled examination. The mind is never passive; it is in perpetual activity, delicate, receptive, responsive to stimuli. You cannot postpone its life until you have sharpened it. Whatever possibilities of mental life teaching should impart must be exhibited here and now. That is the golden rule of education. There is the proverb about the difficulty of seeing the woods because of the trees. That difficulty is exactly the point I am enforcing. The problem of education is to make the pupil see the woods by means of the trees. And I suggest at this point that the medical record, properly structured, is the ideal instrument whereby the student can start immediately to see the woods by means of the trees. It is the chess board upon which one will play the chess game — and do not underestimate a student's capacity to master it and surpass his or her professors if once told what it is all about, and if audited rigorously and made to do the job over and over again until it is right. We must beware of the esotericism of

knowledge that keeps the human mind in a state where it can no longer deal with practical reality.

We must find a way to think about a medical degree that integrates us into, and not isolates us from, the fabric of society. We can respect a degree without worshipping it. If it makes us look down upon others in the medical field who have a diploma of the bricks instead of a diploma of the books, better we had never made a ceremony of receiving it. And if it teaches one to be proud of what one knows, but ashamed of one's ignorance, then better the faculty had never awarded it. From George Spencer Brown's words, "The situation is doubly corrupt. It is corrupt because not only is pride in itself a mortal sin, but because to teach pride in knowledge is to put an effective barrier against any advance upon what is already known, since it makes one ashamed to look beyond the bonds of one's own ignorance. To those prepared to enter with respect the realm of their own great and universal ignorance, the secrets of being will eventually unfold, but they will do so only in a measure according to our freedom from natural and indoctrinated shame of our own ignorance." Although most of us would deny that we are victims of such shame, we are to a far greater degree than we might realize. It was Samuel Z. Goldhaber HMS '76 who wrote in the journal *Science* in September 1973 that the Harvard faculty's dissatisfaction with the curriculum changes first became apparent when the National Board scores fell, and that a fourth year student said that the one thing everyone was amazed at was how little the students knew. If there had been basic changes in the Harvard curriculum instead of rearrangements and the increase of elective time, if the faculty had cured their preoccupation with memory games and had seen that Board exams were removed as a fundamental way of examining someone, then they might have said, "How great it is to see the students taking better and better care of patients, as their reliable manuscripts, the patients' records show". And the students might have said, "We have learned to be reliable and the faculty is amazed at how well we can do a job without formal preparation, once they tell us what is expected

and once they demonstrate and document themselves what total care to an individual really is".

With 200 million people in this country, it is not important that every single individual be exposed to everything, but it is important that whatever one does, one does with integrity. Some of us will do one thing, some of us will do 100 things, but time should be the variable and the number of tasks should be the variable, and the level of achievement should be the constant, and then we can build a solid society. That can only be true if each perceives the framework in which his or her piece must fall, to create the whole for us all. And that means that we must communicate with one another to develop structures so that we can build together. It is true, as Norbert Weiner said, that if you want to understand a society, understand the communication tools that belong to that society.

Finally then, let us leave promising one another that we shall always be guided more by the needs of our patients than by the power of our degree — that no matter how expert and talented we become in one part of medicine or how powerful we become in one part of society, we shall never act as if we believe that a part is greater than the whole. The whole is, after all, seen more clearly by the Vermonter all day alone on the hills, or the lobsterman all day alone at sea. To paraphrase Brown again, "To arrive at the simplest truth requires years of contemplation. Not activity, not reasoning, not calculation. Not busy behavior of any kind. Not talking, not making an effort." Simply bearing in mind that we need the means to communicate and work together to care for all the people in a manner that is meaningful to the people themselves and not according to a personal pride in knowledge and technique.



The Unmaking of a Doctor

by Robert P. Cabaj '74

At Harvard Medical School, one must become a doctor in spite of, and not because of, the system. To me, a doctor means a practicing clinician — someone trained to deal with the sufferings that he or she can expect to encounter in the real world. Harvard exerts a more than subtle push into research, academics, and administration, relegating the role of the practicing physician to the dreaded phrase, LMD, local medical doctor. Few of us were warned in the beginning that if we wished to become clinicians — and be comfortable in that role — we should go to medical school somewhere else. During the basic science years, a trip to Stockholm to collect a Nobel Prize was flaunted as much more important than the successful management of a suffering person. Lectures for the most part were given by researchers who are usually the worst public speakers and who have absolutely no perspective on the importance of their topic in the total scheme of medical education. The few good teachers we had were lost to us if they did not devote time to research instead of teaching. A move was made to require six months of basic science work in our extensive clinical years. This resolution was successfully checked after I and other class members voiced our desire to be clinicians to Dr. Leaf.

In the basic science years, I felt incredible competition, even without grades. I can only guess the dread the present classes feel under the onus and pressure of a grading system. I saw myself and others becoming depressed, so-

cially withdrawn, and guilty if we were not devoting full time to medical studies. Copies of Harrison's textbook were taken along on any vacation or holidays, usually left unread, to help ward off the anxiety felt when one thought there were some fellow students back in their room studying, memorizing, becoming less human. I was more and more on the periphery of the class, making a point of falling asleep in the few classes I attended, taking pleasure in doing poorly, pretending to know nothing, and endorsing the higher pleasures of wanton living.

The clinical years — looked forward to with hope — were not much better. The whole nonsense of useless article quoting and the game of one-upmanship began, resulting only in the anguish and frustration of students hoping to learn the practice and art of medicine. I was again withdrawn, quiet, and would make jokes rather than impersonalize patients by referring to them as "the gallbladder in 503" or talk about the latest irrelevant *Journal* article. In my medical clerkship, I encountered frightened, harried, role-playing residents and interns, forced by Harvard to feel insecure, trapped behind white coats and the specter of the visit. The student was treated either as a child who knew nothing or an intern who knew everything, but rarely as a person-in-training. Only after I said I would ignore article-quoting fellows and spend time with my patients as people and study relevant texts and articles did I relax and start to learn medicine.

One of the best things I learned at Harvard is that common things occur commonly, but, unfortunately, Harvard does not teach common things. There is a new curriculum now, with more basic sciences, brought on in part by Harvard's plummeting National Board score averages. I do not know if this is good or bad. But what will students be learning? We are the best trained physicians in the world to treat cholera — knowledge useless here in the USA. But do we know much about alcoholism, drug addiction, depression, or sexual dysfunctions? We all learned the theoretical importance of the fava bean, but what about the epidemiology of tuberculosis in the Boston ghettos, the unique medical concerns of gay people, or all the intricacies of obtaining abortions? And if Harvard really wants to train leaders of medicine, why is it withdrawing support from its family practice program? Why does it not include a real psychiatry course in the curriculum? And why, once it was forced out of Boston City Hospital, has it not made a public and active commitment to community health care?

This is an angry speech and a personal and necessarily prejudiced survey. I am angry that Harvard, complacent behind its mystique, made learning to become a doctor such a needlessly hard task, while having the audacity to claim it was making us leaders of medicine. A friend of mine was reflecting on his three months of medicine, but his phrase applies equally well to all four years: "Let us not forget how truly bad it was."

The Great Health Care Game

by Richard J. Stadtmiller '74



There is a gigantic game played here in medical heaven. It is called the great health care game. The pawns in this game are the patients. The game centers around them, yet they are not the objects of the game. The game exists because of them, it even serves them from time to time, but it is greater and more powerful than they. The players in the game are the medical teams. They move the pieces, that is to say the patients, about and make decisions. They think that they are in charge, the masters of the process, but in reality they are controlled by the game and serve its needs.

The object of the game is to perpetuate itself. This is done by means of a concept called fighting disease or delivering health care or preventing illness,

whichever you want to call it. The game is usually played in hospitals, although it can be played anywhere, including research labs and libraries. The playing pieces enter the playing field through any of several different routes. Then they are examined, moved about, and subjected to intrusions known as laboratory tests, as various aspects of their reality are projected onto paper and silver-coated plastic. Then they are treated according to the latest formulations. These are the rubrics of the game. Money is exchanged, reputations are made; much talk and writing are generated. If surgeons, we prove that we are tough; if physicians, that we are brilliant; if psychiatrists, that we are insightful. These are by-products of the game.

We students come to medical school to learn the rules of the game. We have prepared for years for this opportunity. We pay for the experience. Our task is to let all other concerns fall by the wayside, as we learn how to play the game.

No matter that our youth is spent. The game eats up life in its defense against death.

No matter that we must learn to know twenty new people each month and adjust to a different discipline. Human relationships and psychic energy are expendable.

No matter that feelings generated by patients must be suppressed. No tears for suffering, no meaningful exchanges, no compassion, no joy are permitted. The game allows no time for feelings. It allows only that the job must be done, the correct therapies administered. The most efficient players are the coldest. No matter that we can't sleep at night. The game continues unceasingly.

No matter that our wives and husbands are lonely, our children neurotic. The game must go on.

No matter that we are angry and outraged at the unplanned cruelties, humiliated and afraid in visit rounds.

No matter that we are set adrift in a sea of conflicting demands with no light in sight nor any dry land. The game must be learned. All must introject, or succumb to, its rules.

Come my fellow students. Let us take the oath as we begin our rite of passage into the game.

HMS V: Variations in the Diet

by John R. Delfs '74

In the past, one of the factors that has made a Harvard Medical School education an advantage has been a willingness on the part of those charged with students' fates to recognize and to encourage the constructive pursuit of individual interests and goals.

I had originally planned to call attention to a group of us within the graduating class, about twenty-six strong, who entered HMS five years ago with the class of 1973, deviated from the prescribed path of medical education for one year, and now find ourselves in the position of graduating with the class of 1974. Some members of this group used their year off to carry out research studies, others worked in clinical situations around the world, still others used the time for self-development in areas not as obviously related to medicine.

In that students have ventured from the usual paths in search of experiences of value, they should be saluted. A year's work in an area of special interest can season a medical education with a healthy amount of variety. Variety in the educational process has several advantages. First, it keeps interest alive and increases motivation to learn. Second, the learning process itself is strengthened by experiences that provide broader and clearer perspectives in the area of study, and increased opportunity for intercorrelation of new learning.

Instead of pursuing the advantages of an extra year though, I would like to focus on how a change in the basic structure of the Medical School experience might confer some of the same advantages. Two problems are apparent to me in the structure of medical

school education. First, the initial or so-called "pre-clinical" portion is the only time during medical school that the student is exposed to any sort of a comprehensive treatment of the pathophysiology and anatomy of disease. But this is at a time when the student has almost no familiarity with any of the situations in which this material will be of relevance. Second, the later portion, of "clinical" experience, due in large part to the necessarily random nature of any clinical experience, provides a less-than-comprehensive exposure to disease processes and their treatment.

During the time of exposure to the comprehensive "pre-clinical" material, students lack any acquaintance with the milieu of clinical medicine, with which they might have correlated this book-lecture-lab presentation of data. Later, when better able to integrate data into a pool of useful knowledge, students find the experience incomplete — and many new physicians go out into the world of clinical medicine with a preparation that is much less adequate than it might have been.

It seems to me that at least one answer is immediately forthcoming. It is a radical approach only in that it pays service more to education than to tradition. It helps to be acquainted with the general situation before trying to learn all the details. An example outside medicine is perhaps appropriate. It is extremely inefficient and often unsuccessful for a future airline pilot to take a ground school in how to conduct flight by instruments before having been in a cockpit. However, after gaining some familiarity with the appearance of the flight controls and instruments, one is able to benefit greatly from ground

school to learn the details using those same instruments in safely guiding a plane to the ground even when the visibility is near zero. Perhaps it is as important to give future physicians an introduction to clinical medicine before expecting an individual to assimilate vast amounts of data supposedly applicable to the clinical situation.

Rather than the traditional sequence of classroom then clinic, it seems an educationally more sound approach would be to familiarize the students with the clinical situation before they undertake to learn the details in the so-called "pre-clinical" courses. Students who had taken histories and done physical examinations, who had been exposed to approaches to real clinical problems and had witnessed pathophysiology firsthand, would have a context into which they could later integrate more comprehensive classroom material. After this initial and substantial involvement in clinical medicine, students could much better utilize the marvelous resources of the "pre-clinical" curriculum. A final experience in the clinic could vest more responsibility in students and provide a more intensive preparation for the post-graduate clinical training.

We have for too long adhered to, or moved only slightly from, the paths of traditional medical education. Harvard Medical School has recognized the importance of individual variations in the diet of medical education and should be commended for this. It should now look more critically at how the goal of educating future physicians could be better served by other intelligent variations in the structure of medical education.

A Positive Motivation for Childhood Lung Disease Research

by E. Joseph Mescher '74

I would like to relate to you how it was that I became involved in research on childhood lung diseases. First I will tell you what I saw around me that made me want to get involved in research, and then I will explain briefly where it led me and share with you some of the insights the experience has given me.

My story begins when I was a student assigned to Children's Hospital on a ward with children aged five and above. On this particular ward there are large numbers of children with cystic fibrosis, a congenital disease of infants and children that causes their lungs to produce a thick tenacious mucous blocking their airways, and slowly leads to recurrent pneumonia and chronic lung disease. Unfortunately few of these children even grow to be adults. Along with many of the staff, I often felt helpless and discouraged in the face of problems that seemed unsolvable, and in the face of the resulting tragedy in each patient's life.

As a result of this and several other experiences with lung diseases I decided

to look for a research group that I might join for several months. I felt particularly drawn toward pediatric lung problems. In a rather idealistic fashion, I was looking for a place where I could learn more about the lung and hopefully make some contribution toward solving the many problems.

And so I joined a group working on newborn infant hyaline membrane disease. At the time I joined, the group was making rapid progress in the treatment of this disease, which affects thousands of premature newborn infants each year. In our research while I was there, we were able at least to make another small contribution to knowledge about the basic mechanisms of the disease and were able to suggest several new ideas that looked promising for others to try.

The experience taught me two things. First, I saw what research could do. As this group's therapeutic method has been spread throughout the world, it has saved more infants' lives than if they and a hundred other doctors had

spent their entire lives just caring for infants with hyaline membrane disease by the older methods. The previous years of investigation had borne fruit with an idea that could be used by others.

Secondly, I gained insight into why many of the professors we see around us at the Medical School may have begun to pursue research. I wonder now if it was not a frustration with the knowledge available at the time and a desire to make a positive contribution that led many of them to begin research, and not a selfish isolationism as is sometimes portrayed.

I am not suggesting that everyone take up research, even though they may perceive many of the same problems. I think that research is just one of the ways of responding to those unsolvable clinical problems in a positive way. I just hope that there will always be a place within medicine for those who want to make this kind of contribution.



Some Contradictions in the Medical School

by David M. Rosenfeld '74

Being a student at Harvard Medical School has led me to observe some uncomfortable contradictions between what the Medical School says it is doing and what it actually does. At the same time that members of the administration are touring the country, discussing the need for family health and training programs for family physicians, Harvard's own Family Health Care Program is dying — basically from a lack of Medical School money and commitment.

In another manner, individual actions are often made ambiguous by institutional requirements, and more particularly, I find my own personal integrity affected by the structure and actions of the Medical School. Dostoevsky, in *The Brothers Karamazov*, struggles with the implications of the conclusion that 'if there is no God, then everything is permitted.' If we believe with Dostoevsky that it is because of our relationships with other people that all things are not permitted, then we must assess our relationships with others (be they direct, or mediated via institutional affiliation) and assure that their structure does not contradict our own sense of personal integrity.

By virtue of our Medical School affiliation, we as students and alumni are implicated in the oppression of two specific groups of people with whom we interact at Harvard — wives of male medical students and salary and wage workers. I believe that we must accept responsibility for this oppression and seek meaningful solutions to it.

For most wives in years past, and for many today, having a husband in medical school has meant numerous sacrifices. A separate career is often impossible or the training required is hopelessly delayed. Many women must work to support their husbands at jobs more often than not uninteresting and

dead-end. The organization of prolonged and time-consuming post-graduate training programs further exaggerates the above demands, and postpones any significant restructuring of other priorities. If there are children, the wife must also function essentially as a single parent while the medical student, intern, or resident pursues his apprenticeship.

If one thinks in terms of the traditional family-based roles, it might be argued that these wives of medical students are not, in fact, oppressed by such a relationship to the Medical School, for their lives are linked with that of a physician, and the future financial rewards are likely to be great. But neither of these 'rewards' substitutes for their inability to pursue an equally stimulating direction. The degree of oppression based on sex inherent in this inequality is further exaggerated when one considers that the husbands of female medical students are nowhere near as likely to find themselves in the same situation as their female counterparts.

Regarding solutions, it is apparent that the structure of the Medical School and of post-graduate training must be altered so that two careers are possible within a single family. Part of this implies relief from the financial burden of medical school, but more importantly, there must be a move away from the concept that physicians learn proportionately to the time spent in the hospital. In no other profession has the apprenticeship concept retained such a strong hold, and I am still convinced that the ridiculous hours spent in the hospital (and away from family, friends, and introspection) have more to do with the training of the ego than with the intellect of the physician.

The second group consists of salary and wage workers at the Medical

School. As a group, these people are hard-working and generally engaged in uninteresting work, for which they receive little recognition. Their jobs are often without meaningful career structures, and yet, by their work, they make possible our education and research. Structurally speaking, they perform many of the jobs that are the tedious underpinning of the exciting work that we have the opportunity to do.

Despite the integral part these people play in the functioning of the Medical School, they have been traditionally unorganized and low paid. Their wages are particularly low when compared with those of the faculty and with projected student incomes. For many years, however, the association with Harvard has been considered prestigious, and has equalled a sort of non-financial fringe benefit. The allure of prestige, however, has been wearing thin and the fact of low pay has become dominant. An employee union is currently taking shape here and their slogan accurately states their situation — "We Can't Eat Prestige".

What is our responsibility toward these workers? First, and immediately, we must support the union. Considering current wages, the benefits of our association with these workers has greater benefits for us than for them. Hence they are basically oppressed by this relationship. Considering more long-term solutions, it is apparent that the structure of Harvard is basically oppressive in that the creative work of few is supported by the non-creative work of many. We must strive to make our institution more flexible, so that both knowledge and supportive work will be shared by all who work here, and so, in a sense, create a community of scholars that would ultimately be in the best interests of all.

If we take our responsibilities to others as a serious commitment, then we must as individuals assure that others are not in an oppressed condition because of us. There is then a contradiction between our assumption of such responsibility and our membership in the Medical School, and the resolution of this contradiction lies in those actions we take to alter the structure and actions of this Medical School so that they are in accord with our basic principles of individual accountability.

Perspectives for the Future: What Can We Expect of Harvard?

by Craig H. Yorke, Jr. '74

In the next four years, many of my fellow black alumni and I will be looking back at the Harvard Medical School somewhat differently than will most of our classmates. What we will be seeing, I believe, is an institution living through a period in which the problems of black people are no longer fashionable; an institution facing two particular issues that may profoundly affect our future here: money and selection.

First, the matter of money. Who can afford to be a student here? It is no secret that this is a period of rising tuition, declining scholarship funds, and ever increasing student indebtedness. These trends have caused some applicants to avoid Harvard Medical School in favor of state schools. More important, these factors have caused this medical school to re-evaluate its own position. Rightly or wrongly, it sees itself as increasingly unable to meet the rising costs of student aid without increased outside assistance. Some in the administration wonder whether they can continue to admit applicants without regard to their financial status, or whether this would be fiscal irresponsibility.

These pressures are national, of course, and our wider concern would be a possible decline in the production of black physicians in this country. We expect that the number of black students here at Harvard can be maintained, but we fear that it will be at the expense of those of our black peers less able to pay. This must not happen. It would devalue my own degree and it would devalue this medical school with the community to which it committed itself on the death of Martin Luther King. In resisting this pressure and admitting (black) students from diverse backgrounds, Harvard Medical School will help provide physicians for the black community and will help develop a

new generation of black teachers and scholars. Needless to say, these objectives hardly exclude one another.

The problem of money has, at least, an obvious solution. Much harder for us and for the Medical School is the question of selection. Who, among too many qualified applicants, can be selected to study here? The U.S. Supreme Court recently faced the case of a rejected white law school applicant, Marco DeFunis, who sued the University of Washington Law School because "less qualified" minority applicants had been admitted. What can we expect of Harvard on this difficult issue of selection? Well, I was gratified to read an (*amicus curiae*) brief in this case submitted by Archibald Cox for the President and Fellows of Harvard College. In it, he notes that "the critical criteria (for selection) are often individual qualities or experiences not dependent on race, but sometimes associated with it." If such criteria seem too subjective they are only more overtly so than the selection

criteria already in use. We agree with Professor Cox that academic authorities should make "a conscious selection of qualified students from the greatest variety of cultural, social, and economic backgrounds in order to improve the educational experience of the whole student body."

I have avoided any discussion of my own experience here, not because it is uninteresting, but because the issues of money and selection loom larger for those of us whose future here sometimes seems uncertain. I trust that our newly won place at Harvard will be as secure as our own future can make it.



The Secret of Caring for the Patient—Our Value Education

by Joseph Tenenbaum '74

We've changed a lot in four years. Obviously, we've learned a great deal of medicine. More fundamental than that, however, is that we have learned to work with sick people. Four years ago, few of us had ever encountered anyone with intractable pain, a terminal illness, or psychosis; nor had we taken an intimate personal history, done a routine rectal or pelvic exam, or witnessed a laparotomy. These experiences have now become the commonplaces of our daily work. How we adapted to them — how our gut responses to illness and to people who were sick changed and matured — comprised our value education.

What was this process really like? For a profession that prides itself on the art of dealing with people, our training in this area has been surprisingly informal. We spent many hours hearing lectures, attending labs, and going on rounds which focused on medical science. But formal training in how people feel when they are sick and how they are best managed was relegated to the few lectures in behavioral science, psychiatry, and human sexuality and to the occasional social service and liaison psychiatry rounds.

The training in caring for patients has also been uncritical. We were taught to distinguish critically between good and bad diagnosis and management. Yet we were left largely on our own to decide which of the many styles and manners of dealing with patients that we saw was most appropriate. Certainly, obviously indecent and inconsiderate treatment was condemned. But the range of what passed as acceptable was staggering: from the compassionate chief of surgery who reassured a troubled patient by holding her hand and interrupted rounds to bring her a bedpan, to the harried intern who man-

aged a "turkey" by threatening punitive sigmoidoscopy.

Most important in fashioning our values was the environment in which we functioned — the acute care teaching hospital. We quickly learned that taking good care of a patient in this setting was synonymous with thorough work-ups, aggressive diagnosis, and current therapies. We learned to narrow our focus to the patient's illness; concern for his or her human needs was tacitly de-emphasized. The system of rewards and punishments reinforced this ethic. If we didn't report the EKG of a patient with a history of angina, we would be quickly (and deservedly) reprimanded; but if we neglected to report that the man had not had intercourse with his wife because he feared a myocardial infarction, nothing would be said. We would be criticized if we didn't spend five minutes to listen to our patient's heart and chest on rounds, but not if we failed to spend five minutes simply talking with him or her. If we presented our patient as a "forty-eight year old male alcoholic with a history of upper GI bleeds," we would be praised for succinctness; but if our opening comment added that "Mr. Holland is a forty-eight year old father of three, who works as a postal clerk and enjoys bowling," we would be condemned for being longwinded. Such examples underscore the bias we encountered. For those of us who chose medicine because we wanted to help patients, and even for those of us who sought a career in research but wanted to learn how to take care of patients, this emphasis seemed restrictive.

Such perceptions of value education in the teaching hospital are hardly novel. Nearly sixty years ago, Dr. Francis Peabody, Director of the Thorndike Laboratory, admitted that hospitals

were "... apt to deteriorate into de-humanized machines" where "... even the physician who has the patient's welfare most at heart finds that the pressure of work forces him to give most of his attention to the critically sick." Dr. Peabody offered medical students the pearl, "The secret of the care of the patient is in caring for the patient." His affirmation of the humane art of medicine is still timely. Many of us have reached the same wisdom on our own. In the absence of formal training and critical thinking about patient care, we were led by our own feelings of empathy and our own instincts of decency and humanity. We were inspired by the examples set by the gifted and humane physicians among our faculty.

Yet I doubt whether humane instincts alone will be adequate to what faces us. We witness a revolution in health care. It has become a rapidly growing industry, generating eighty billion dollars a year and employing three million people. It is increasingly tied to government support and regulation and managed by bureaucratic administrations. The physician's role is changing. One is a member of a team. The laying on of hands is giving way to the insertion of catheters and biopsy needles. Compassionate care will still be necessary, but it won't be sufficient. It must be coupled with greater sophistication in the ethics of the psychosocial aspect of illness.

Our class has taken steps to meet this need. We continued the student sponsored social medicine lectures. Some students used the elective period to study family practice and ambulatory care medicine. Ten percent have selected training programs geared to family practice. Now we take a pledge to a new set of principles for practice.

We have much more to learn — indeed, some things to forget — about caring for the patient. I hope that as house staff training begins, the pressure of hard work, the excitement of practicing medicine, and the drive of ambition will not blind us to the needs of our patients. We must learn to deliver superb care in a humane way, to change the hospitals in which we work into responsive institutions, and to teach our students and colleagues that excellence encompasses both the science and the art of practice.

Dentistry as Medicine

by Nalton F. Ferraro, D.M.D. '74

The Dental School at Harvard was established in 1867 at the invitation of a medical school committee. The Medical School, at that time, was already 85 years old and this particular committee recognized that dentistry "supposes a thorough acquaintance with the processes of dentition, physiologically and pathologically considered. Hence arises the necessity for a knowledge of the general principles of anatomy, physiology, surgery, chemistry, and *materia medica* . . . a medical school already established is therefore the best place at which these various studies can be attended to."

I do not want to talk about the establishment of dentistry as an MD specialty of medicine. Nor do I want to talk about the establishment of departments of stomatology in the country's medical schools. I have personal views concerning these topics but I am more interested in providing some random thoughts about dentistry as a healing art and science, which uses the same methods as the rest of medicine to grow as an academic and clinical discipline.

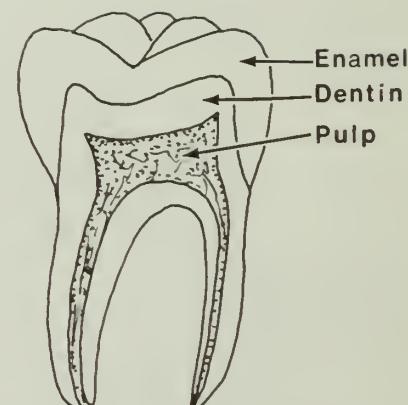
First, the studies concerning the efficacy of water fluoridation in preventing dental caries are among the most solid in medicine — prospective studies that have been continuing for well over twenty years. Second, the tooth itself is a fascinating structure composed of three different calcified tissues surrounding nerves and vessels. It is supported by bone and ligament and has exquisite proprioception. Pathology of the tooth and oral cavity, and their aborted development produce some of the most interesting and diverse pathology in all of medicine. Third, oral disease often interrelates with diseases in other organ systems — e.g. bacteremia and the damaged heart valve. Oral manifestation may be the first signs of systemic disease — this is true in pemphigus vulgaris, Vitamin B



deficiencies, a number of bone diseases, a number of syndromes, and many others.

This leaves a moment to talk about the patient. In most cases, oral disease does not threaten life (there are exceptions). But if our sole perspective on disease is the dramatic saving of a life at 2 a.m. in an emergency room, then there is going to be a hell of a lot of non-dead miserable patients walking around. The point is that patients with oral disease have just that — disease, and it adversely affects the quality of their lives.

I hope that you, my classmates, find out what dental services are offered in the hospitals in which you are working and that you utilize dental consults without hesitation. And I certainly hope that when you have a patient open his or her mouth, your examination will not start with the tonsils, but about ten centimeters anteriorly.



The Future of the University Medical Center

by Dean Robert H. Ebert

The term "medical center" is a confusing one. It is used to signify anything from a major community hospital to an institutional complex including a university teaching hospital, a medical school, a dental school, a school of nursing and a school of allied health professions. For my purposes here, I shall use the term "medical center" (or "university medical center") as synonymous with university teaching hospital.

According to conventional wisdom, the university medical center is an integral part of the university, fulfilling its multiple roles most effectively when this relationship is as strong as possible. My thesis is that the concerns of the medical center and those of the university are not, in fact, always congruent; that complete integration of the two may not enhance the medical center's ability to deal with the problems it faces and indeed may, at times, detract from it.

The Evolution of the University Medical Center

In 1910, the famous report of Abraham Flexner to the Carnegie Foundation marked the beginning of the medical center as we know it today. Flexner decried the fact that clinical departments were staffed almost entirely by part-time faculty who seemed more interested in enhancing their reputations as successful practitioners than in teaching and other academic pursuits. He proposed the model of the German university clinical center and urged that clinical departments have full-time members of the faculty in every way similar to the full-time members of pre-clinical departments.

There was no exact prototype for what evolved under the influence of the Flexner Report. A number of different kinds of hospitals provided the starting point for the so-called medical center —

some voluntary hospitals, some municipal or county, some state owned, and some owned by the university — but they all developed certain common qualities based on the philosophy of the Report. They became closely associated with the university and in some cases integral parts of it. They recruited full-time heads of departments and over a period of time significant numbers of full-time clinical faculty. The full-time faculty finally came to dominate the teaching hospital and control the staffing. An academic appointment in the university became a prerequisite for appointment in most teaching hospitals.

The Flexner Report not only revolutionized American medical schools, but had a significant impact on the organization of medical care as well. It gave final impetus to the dominance of the specialties over the practice of medicine — and, among them, to the specialists of the most prestigious hospitals.

Flexner did not spell out a precise philosophy for the teaching hospital, but over a period of years one came to be articulated by those responsible for the creation of what was to become the medical center. The primary responsibilities of the center were to be teaching and research: patient care was secondary and was provided in order to offer "teaching material" for students and house staff and the opportunity for clinical research. The prime interest was in the hospitalized patient, and the outpatient department was important only because it offered a convenient screen for patients with interesting diseases who might require hospitalization or be candidates for clinical research. Some centers created after 1910, which were conceived from the start as university hospitals, established the policy that most care provided should be on a referral basis. This was in part to establish a non-competitive posture toward the practicing physicians in the community, and in part to further the aims of teaching and research. State university hospitals in particular felt it necessary to follow this policy.

The evolution of the university medical center was gradual until after World War II. Amounts of money for development, faculty salaries, and research were limited; universities had to depend on private funds, or, in state universities, on money voted by legislatures.

During the period 1950-68, all this changed with the advent of liberal financial support by the NIH. Technically this support was for research and research training, but indirectly it permitted the expansion of many other medical center functions and was responsible for the dramatic expansion of full-time clinical departments. The full flowering of the "Flexnerian philosophy" was now possible. Full-time clinical faculty could now devote increasing attention to research and research training, and could justify these activities on the basis of federal funding. There was ample funding for new laboratories, equipment, technicians, and most important of all, for post-doctoral fellows. Research support was categorical and encouraged the natural trend toward subspecialization. Clinical faculties responded rapidly and in both the medical and surgical specialties, departments were subdivided to reflect the interests of the subspecialists.

These changes had an important effect on the training of interns and residents. The teaching hospital was the source of almost all undergraduate clinical education, and the successful models medical students perceived were the full-time clinical professors. Under these influences, more and more students chose the increasingly prestigious university medical centers for their post-graduate training. The quality of house staff education in the medical centers was good, but it was inevitably oriented toward a high degree of specialization.

During the years 1950-68, there was not only liberal funding for research and research training, but also a fifteen per cent increase in the annual budget, which allowed for both the funding of new centers and comfortable expansion of well established centers. This gave the university medical center the illusion of a kind of stability and permanence, which encouraged it to ignore or postpone consideration of a series of new problems that began confronting it both directly and indirectly. The rising cost of medical care was a fact that hit

the teaching hospital directly. While it was possible to pass the increase along to third party payers, there was a growing resistance to the idea that all increases could be accepted uncritically by the insurers. Simultaneously, the public began to complain that as cost went up, the availability of medical services diminished. There was particular criticism of the failure to replace general practitioners and family physicians in both urban and rural America. What was the point of more and more specialists and increasingly complex medical centers if one could not find a doctor when a family member was sick? The fact that new medical schools were being created and established schools expanding was hardly reassuring if all that they intended to produce was more specialists. As urban communities began organizing in the 1960s they began to question the traditional organization of ambulatory services in teaching hospitals and to ask if the medical center did not have a primary responsibility to its immediate community. And in 1966, the Comprehensive Health Planning Act created agencies in each state mandated to look at total community needs for new hospital beds and new facilities.

This growing tide of problems did not hit the medical center with full force until 1969, with the advent of a new federal administration that began to question the sanctity of automatic increases in the NIH budget. Suddenly confidence in continuing federal support of the Flexnerian model medical center was shaken, and medical centers were faced with the specter of decreasing federal funds just when people were agitating for new programs and new functions. The decision of HEW to phase out many training programs and the liberal support of postdoctoral fellows was the final blow, for these had become the core of programs in the clinical departments.

What had the university to do with all of this? Nothing — and everything. The university as an institution did not consciously plan the medical center as it evolved; much of its evolution was dependent upon programs launched by the federal government. But it did accept the view that these programs were desirable, and it did not examine critically the consequence of dependence upon federal support. It built lavishly

with matching funds from the federal government and assumed an increasing burden of overhead costs. As long as these costs could be paid for from federal grants, the books were in balance; but the university was placed in jeopardy when programs were lost.

Perhaps the most important influence the university exerted was to encourage the pursuit of academic excellence. After all, this was what the university was all about, and who could criticize the desire to recruit the very best academic physicians — particularly if they could bring as part of their dowry substantial research and training grants. But what the university did not do was to anticipate the grave problems that now face medical centers — nor was it organized to solve them.

The Changing Role of the Medical Center

The most profound mistake of the university medical center was its failure to recognize the significance of the gradual decline in its role as a referral center, which was assumed to be its most significant patient care role. Curiously assuming a static medical care system, many failed to realize that the very success of the medical center as a training ground for specialists had diminished the need for its function as a referral center. Why should its newly trained specialist, now practicing in a well-equipped large community hospital, need to refer anything but the most esoteric problem back to the medical center? The unrecognized trend has been for large community hospitals to become well staffed with superspecialists and to serve as referral centers for general practitioners and family physicians in surrounding areas. There will continue to be referrals to the university medical center because there will always be innovations in care originating in the center, but any apparently successful therapy will soon find its way to the community hospital. I would estimate that a large community hospital can provide reasonable care for over ninety-five per cent of the problem cases admitted.

What, then, has happened to the university medical center? It has become the community hospital for the surrounding area. Although it retains its

identification as a referral center, the trend is increasingly in the direction of its community role. Massachusetts General Hospital, for example, estimates that eighty per cent of the patients are self-referred and only twenty per cent are referred by physicians.

The university medical center must restructure itself if it is to respond more effectively to a set of community demands not necessarily viewed as the interests of an academic center. It must be staffed to provide comprehensive care for those who have no other access to care, and at the same time, be prepared to care for the most complex medical problems. Many centers are responding to these problems and have developed outreach programs in their surrounding communities. But this has been done on an ad hoc basis and rarely represents the primary interest of academic department heads.

In the recent past there was little conflict between the perceived staffing needs of academic departments in the medical center and the goals of the university. The subspecialties were capable of developing good and at times outstanding research programs, and liberally funded fellowship programs attracted an excellent pool of young men and women anxious to advance their careers by becoming expert in one or another subspecialty of medicine. For some, medical practice was the primary goal and participation in research a means to this end. But for others, research became a fundamental concern because it was perceived as the most important criterion for academic advancement. No great insight is needed to realize that promotions committees may give lip service to clinical competence and teaching, but are most comfortable when evaluating the research performed by a candidate.

This tendency in academic medicine has produced some first-rate research and some superb clinician-scholars. But doctors who have spent eighty per cent of their time doing biomedical research for ten years are not well equipped to solve the more mundane problems of providing comprehensive care to a community. Nor, on the other hand, is the university well equipped to evaluate the credentials of those who are interested and trained in tackling such "non-academic" problems.

Does interest in such problems as the following provide the basis for academic advancement? — How does one organize a program for providing comprehensive care to a community, possibly on a prepaid basis? How does one tackle the problem of the distribution of specialists versus primary care physicians? What should be the training program for the primary physician? What are the points of interrelationship between the university medical center and the community hospital, and how do these relate to regional planning? To some extent, work in these areas may be rewarded by academic advancement, but this is far more likely to occur if an individual writes about the problems than if he or she tries to do something about them. Yet it is action that is needed if the medical center is to re-adapt. The creation of models putting blueprints for patient care to the test of reality is needed, to provide a rational basis for correcting the failures in our system of care. The academic rewards for such work are rather limited even though it is badly needed. My point is that if the university is the only judge of what is important — and it makes such judgments by its own system of academic rewards — then progress will be slow. The medical center is more likely to take the initiative if allowed to, because it faces the problems of the real world on a daily basis.

The Medical Center and the University: Together and Apart

Let me now review the various functions of the medical center, and try to determine whether the university or the center itself is the more appropriate authority for each.

Education. (1) *Medical Students.* Of all the functions of the medical center, education of medical students is clearly the most relevant to the university. In the clinical clerkship the purposes of the university and the medical center are served equally well. The university is responsible for the content and quality of education, the center for the environment, and both for the quality of staff. But since the medical student is a candidate for a professional degree, it is primarily the university's responsibility to oversee the entire educational process and to control the degree.

(2) *Internship and Residency Programs.* The official posture of the Association of American Medical Colleges is that these should be the responsibility of the university. I would argue that they are in fact the responsibility of the hospital, and that this is desirable. The certification by a specialty board culminating the internship-residency years is more akin to licensing than to degree granting, for it is meant to assure the public that the individual has both the knowledge and the clinical skills to practice medicine as a specialist.

Interns and residents are still involved with the university as students and sometimes as instructors, but it is the hospital that administratively controls their education. Even the number of house officers is dictated more by service requirements than by educational opportunities. House officers are thus really employees of the hospital and not students in the ordinary sense. Formal transfer of control to the university, then, is neither realistic nor beneficial.

(3) *Postdoctoral Fellowship Programs.* Here there is perhaps more rationale for university involvement. In part these are a continuation of clinical training, but research training is often a significant portion of the program and there is less service involvement than in regular residencies.

(4) *Other Health Professionals.* The medical center should be able to affiliate with more than one college or university sponsoring training programs for dentists, nurses, social workers, technicians, physician assistants, and so on — and should also have the option of being sole sponsor of some programs, particularly those that are highly technical.

(5) *Continuing Education of Physicians.* This will play an increasingly important part in the re-certification of physicians, and should be a joint university-medical center enterprise.

Research. Research is a traditional area of scholarship, and directly or indirectly, the university should assume responsibility for its quality. This becomes increasingly important as more funding takes the form of large center grants. The teaching hospital must take responsibility for what research goes on within it, but it can do so more effectively

in partnership with the university.

Patient Care. This has never been a primary university concern; it is, and should be, the fundamental province of the hospital. It is here that new approaches must be tried. While the expertise of the university may be helpful in certain areas of planning, the medical center must take the full responsibility for implementation.

Affiliation with Other Hospitals. The medical center must be free to participate in regional planning for the purpose of referrals, continuing education, and rational distribution of resources.

Conclusion

It is evident, then, that while the university and the teaching hospital have certain common functions that make close association mutually beneficial, they have others that differ, and may even conflict. The hospital's one overriding function — service to patients — is hampered under the currently fashionable administrative pattern, which makes hospital directors subordinate to university vice presidents, and community health demands consequently subordinate to academic ones.

In the system that evolved at Harvard, the university is affiliated with multiple hospitals, each of which is autonomous and no one of which is designated as the university teaching hospital. This allows the medical school great flexibility and the hospitals considerable independence.

The system would work even better if two other things were to happen: first, a recognition by funding agencies that the teaching hospital has fiscal needs that are tied neither to the university nor to the usual reimbursement formulas; and second, a recognition by the university that the hospital needs individuals who will be creative in ways not commonly thought of as academic.

With the teaching hospital operating as an autonomous institution, rather than as an administrative unit of the university, the needs both of patients and of the university can be better served. I am not pleading the divorce of the teaching hospital and the university, but rather a marriage recognizing equal partners.

An Introduction to J. Englebert Dunphy '33

New President of the HMAA

"In the next few years, I would like to see the alumni along with faculty and students recapture some of the warmth and identification that I think all of us at Harvard felt from the 1930s until the troubles of the last decade." So says J. Englebert Dunphy '33, new president of the Harvard Medical Alumni Association. Dr. Dunphy is presently chairman of the department of surgery at the University of California at San Francisco.

Looking like a conventional physician of the highest order, Dr. Dunphy's placid exterior belies a man filled with an irrepressible buoyant spirit. He seems to delight in his own roguishness intruding upon his redoubtable image. Unabashedly he conducts his first Alumni Council meeting slumped back in his chair, enjoying the debate but not worried about his seemingly unorthodox deportment.

He has a zeal for involvement and confesses with a sheepish grin, "I'd been president of just about everything else and thought maybe one way or another, I might someday be president of the HMAA. It's a warm feeling to come back as president of the alumni and to feel, in a kind of peripheral way, that I'm part of the Harvard scene again." Dr. Dunphy is no stranger to the alumni association since from 1949-1953 he served as secretary when that position simultaneously made him ex-officio editor of the *Bulletin*.

Dr. Dunphy can wax enthusiastic on virtually any issue of the medical spectrum without sounding the least bit pompous. It is an attribute that only comes from someone who has had myriad experience — from practice in Wellesley, Mass. and the Peter Bent Brigham to being chief of surgery at Boston City Hospital — where, he chuckles, "the thing about surviving there (BCH) is to have a sense of humor and a sense of eternity" — to heading the department of surgery at the University of Oregon Medical School and then to California.

He is of the generation that studied at Harvard during other, more halcyon days, although he earnestly maintains that, "The troubles will generate some new cohesion between people. All of the old communications will return but they will be more meaningful because they are much broader and include all segments of society. This is the way it should be."

In the same optimistic vein, Dr. Dunphy is confident that primary care physicians and specialists do not have to cancel each other out. "This idea that the specialist is a hard-core, super-brainy technician who comes in and does some incredible operation and knows nothing about and cares nothing for the patient is totally wrong." Dr. Dunphy speaks of a genuine love that should flow between patient and doctor and his words match his ever-congenial expression. "Patients respond to warm, sympathetic care. No matter how specialized the operation, a patient who thinks he is being treated by a cold automaton of some kind will not react well. Patients want to be loved by their medical specialists just as much as they want to be loved by their family doctor." Dr. Dunphy concedes that there are poor doctors who do not relate well to patients but "not nearly as many bad doctors as bad lawyers," he adds with a mischievous glimmer in his eye.

Does J. Englebert Dunphy practice what he preaches? He admits that it is no mean feat to preserve the concept of the old-fashioned doctor, who gets up out of bed in the middle of the night to see a sick patient, in a university hospital setting. What helps at Cal, according to Dr. Dunphy, is collaboration and cooperation throughout the hospital staff network. "I think our residents try to worry about where the patient comes from, what his family's like. We have good social workers and shortly after an operation we all start to think about what's going to happen afterwards. Does he have a family? Can he go home? If he can't, what can we do to



Dr. Dunphy at Alumni Day 1974

help him out? All this takes good social service. It is difficult because our patients sometimes come from 500 miles away."

It used to be commonplace, Dr. Dunphy recalls, to visit patients at home, and thereby learn a tremendous amount about their backgrounds, behavioral problems, and families. "We all say that the family doctor years ago didn't know very much, wasn't much of a scientist. But one of the reasons he did as well as he did," surmises Dr. Dunphy, "was that he saw the totality of a patient's problems." Nowadays the first contact between patient and doctor is often in the emergency room.

While that bygone style of medical practice may have become obsolete, Dr. Dunphy perpetuates a sincere interest in the fortunes of his medical students at Cal. He coordinates a special interaction with fourth year students by interviewing everyone who applies for a surgical internship, even if his and an individual student's path have never before crossed. He believes it is a valuable endeavor. The faculty must be communicated with also, and Dr. Dunphy sees no reason to downgrade the basic sciences. Instead, he seeks more of an interface, early in the medical students' training, between their desire to see practicing physicians in and out of a hospital setting, with ongoing basic science courses. "Any young man or woman who wants to practice medicine," he says, choosing his words carefully, "and anticipates that it's going to require a boy scout's knowledge of anatomy and a social worker's knowledge of psychiatry . . . is making a great mistake. Good patient care is the daily application of the knowledge of anatomy, physiology, biochemistry, and pharmacology, which every doctor carries to the bedside."

D.W.M.

